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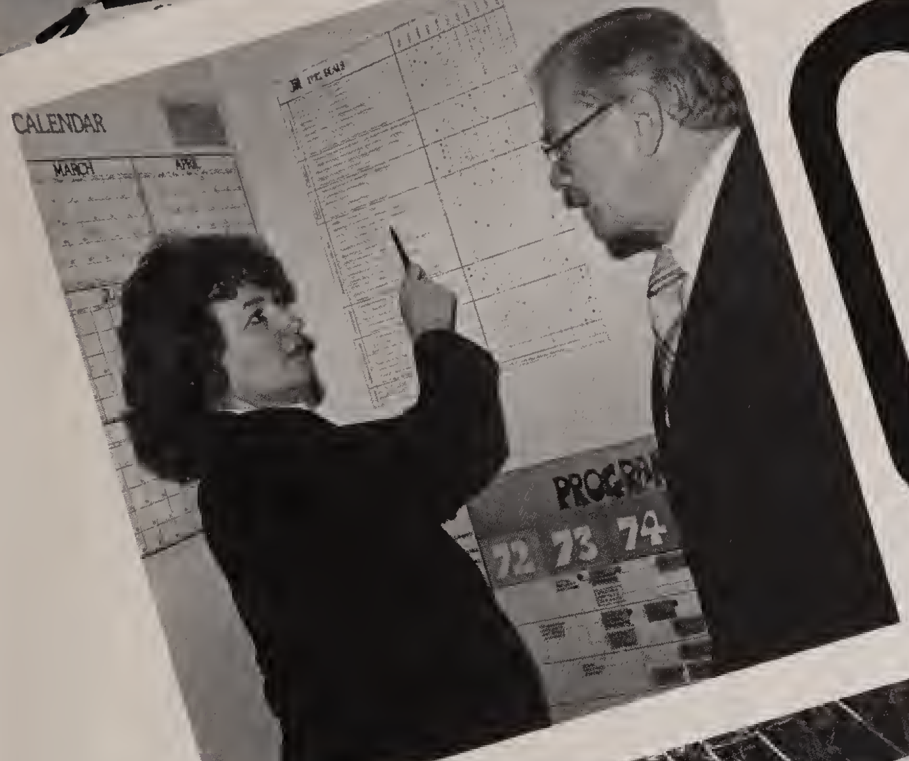

EVALUATION STUDY

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EVALUATION STUDY OF THE NEW YORK INFIRMARY/CENTER FOR INDEPENDENT LIVING

For

THE COMMITTEE FOR THE FUND FOR THE BLIND
THE NEW YORK INFIRMARY

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ANAREM SYSTEMS RESEARCH CORPORATION

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SUMMARY

> "...for we feel that future administrators...should be made keenly aware of the stumbling blocks in the business of acquiring and using information in real settings and of the way in which these problems were solved..., *before* they launch a similar program. To tout the benefits of a new program...without emphasizing its pratfalls and recoveries would do more harm than good. *Many valuable and innovative practices...have come a cropper precisely because of the innovator's failure to alert the practitioners to problems of implementation.* (emphasis authors') In short, the reader should keep in mind that a central purpose of the pilot program,...was to delineate problems in all their starkness, and to demonstrate and propose solutions which might save future administrators the same costly trial and error process."[1]

This quotation from an evaluation report of a pilot project expresses strongly the orientation an evaluation study of a pilot or demonstration project should have in order to be maximally useful. The possibilities to experiment and explore are extremely valuable assets of such projects, and much of their value is not only the actual achievement of goals and objectives, but also the documentation and evaluation of unsuccessful "trial and error processes" that have been encountered. This summary of the evaluation study and its finding will, therefore, enumerate the strengths and successes of CIL, as well as the program aspects which were less successful.

The program was designed to provide training for elderly persons recently suffering from severe visual impairment, so that they may continue to exercise choice about their life styles and activities, despite their visual handicap. The entire structure of the program was designed to locate such elderly visually handicapped persons, assess their need for such training and their capacity to absorb it, and to meet their needs for specific skills by providing both the training and a management structure which would be efficient and economical of funds and other resources.

REACHING THE TARGET POPULATION

CIL was successful in reaching individuals with the required characteristics: 55 years of age and older, recently having experienced severe visual impairment and not previously exposed to training or rehabilitation. About eight percent of all referrals were less than 55 years of age, 43 percent were living alone, 97 percent had vision impairments diagnosed as legally blind or worse, and over 80 percent were 50 years of age, or older, at onset of this severe visual impairment, with one-third of them experiencing this onset within the two years before their referral to CIL.

For those where the information was available, one-third had had some previous service from other agencies or services for the blind. This, however, included social and recreational services. When the outcomes of the initial assessments of the candidates' abilities in the basic skills of Orientation and Mobility (O&M), Activities of Daily Living (ADL), Communications and looking after their person and belongings are considered, all exhibited a fundamental lack of such basic skills in at least three areas. The previous exposure to rehabilitation had not been intensive enough to obviate CIL training.

There has been considerable concern about the elderly segment of the visually impaired population which has been called the "hidden blind." The concern exists because this group is thought to be rather numerous, unknown to the normal service channels, and difficult to reach and inform about available services. The referrals to CIL can be considered a segment, though small, of these "hidden blind:" although many of them were known to the state commissions for the blind, two-thirds had not received any rehabilitation or other services. Their characteristics could now be described.

PROVIDING RELEVANT TRAINING

The areas in which training was provided were selected according to curriculae offered by training facilities for visually impaired children and young adults, since there was no previous experience to guide the construction of a curriculum for the elderly. It was found that the traditional fields of Braille and Typing were not usually of practical significance to most of these students, despite the students' interest in these areas and their willingness to devote intense efforts to learning these skills.

Training in ADL was adequate for the needs at the time of graduation, and was put to good use, and considered valuable on returning home.

O&M, on the other hand, had to be terminated by many students before complete mastery, and many of them therefore, were limited in their ability to go out independently.

The amount of time spent on learning Braille and Typing was considerable, and added up to as much as 60 percent of all instruction time for some students, yet seems to have had little utility for them. Based on our findings, CIL has already reconsidered its policy of teaching these two subjects to any student who expresses an interest in them. Typing, for example, will be limited to those who either already have a typewriter or have a realistic expectation of acquiring one; a major problem for many of the past students who learnt typing but never acquired a typewriter.

O&M training should be intensified so that students will be able to travel outdoors, independently and safely, if they wish to be able to do so. Partial training is wasteful, since there seems to be no realistic opportunity to obtain additional training locally once the students have returned home.

ADL training should consider development of teaching techniques which would foster greater adherance to safety techniques: the students, on the whole, could perform ADL skills, but were lax about safety precautions when handling stoves, hot water, knives, etc.

These recommended changes involve a policy, set by CIL, that students leave the program when they require instruction in fewer than three teaching areas. This policy has led to termination with inadequate O&M training for quite a large proportion since, as was mentioned before, there had been an expectation that additional training would be available locally. Since this has proven to be unobtainable, and O&M is one of the most meaningful skills needed to be independent, it is recommended that this policy for deciding termination of training be changed, so that the opportunity for completing O&M training be provided. This increase in teaching effort and, perhaps, staffing in this area, might be offset partially by savings in the areas of Braille and Typing which can be reduced significantly. Particularly for Braille, minimal instruction to teach coding only, and referral to other training facilities for those who are interested in learning Braille might accomplish a balance in fund allocation.

The reconsideration of the policy regarding the requirement that a minimum number of skills remains to be taught in order to continue training at CIL, should also examine the underlying assumption that all of the skills available for teaching are of equal value to all students. O&M skills are now equated with Typing or operating an Electronic Device. This assumption is not supported by the utility attributed to different subjects, and skills within subjects, by the data obtained by the Follow-Up interviews. There would seem to be no reason to assume such automatic equivalence for mature adults with varying life-styles and needs.

INDEPENDENCE AND THE ABILITY TO CONTINUE IN DESIRED LIFE-STYLES

The attitude of the CIL staff, with its explicit concern for the individual student's needs, situation, capacity and wishes, undoubtedly created the atmosphere where elderly, recently severely visually impaired individuals could come to terms with their condition and deprivation, so that they could face their future life with confidence and a feeling of being able to cope. Former students' explicit comments, as well as their changes in "attitudes towards blindness," showed this clearly. They were realistic about the significance of their condition and limitations, but felt that they could continue to live in their normal, usual world, despite these limitations. Institutionalization had not been a common experience for former students. Quite a few who had feared this as an inevitable outcome no longer felt this to be so.

The Follow-Up interviews did show, however, that this gain in confidence was tempered for about half of them because of further deterioration of vision and/or health. This, of course, created additional needs for training. The implication of this inevitable change in vision and health status is discussed below, under Follow-Up After Termination.

STUDENT SELECTION

On the whole, the students admitted proved to be suitable and able to master the skills called for by the individual teaching plans. About 80 percent of those attending CIL completed half, or more, of the teaching plan developed with their cooperation. The staff was working with a population whose capacities to learn were essentially unknown. The willingness to experiment with many types of students, as long as they demonstrated a need for teaching, was not always successful. It is recommended that such experiences be incorporated formally into policy statements concerning selection of students.

Only a very small proportion of students "gave up" trying to learn specific skills, "learnt nothing" after having received instruction, or were stopped by staff as being unable or unsuitable. A larger proportion did not master specific skills entirely, or failed to reach the skill levels they had planned to learn. The amount of time required to learn different skills adequately and completely has been severely underestimated, and this is particularly true of O&M. As mentioned before, partial learning in O&M skills is not productive.

FAMILY INVOLVEMENT

The interviews with former CIL students showed that, in enough cases to make it worthy of note, the individuals constituting the home environment of these students were not aware of the student's increased abilities and/or special environmental requirements. CIL has attempted to involve family or household members in the training effort, but it has become evident that those willing to participate are not the ones who constitute the problem group. It is recommended that CIL expand the concept of "client" to include significant family or household members, and develop techniques for their systematic involvement. This would lead to the prevention of misguided protection and setting of limits, and in some cases, obtain the physical environment required for the student's optimal functioning.

FOLLOW-UP AFTER TERMINATION

This evaluation was the first systematic Follow-Up conducted on CIL students. It is evident that such a Follow-Up must become an integrated, routine part of any rehabilitation program for the elderly visually handicapped. The data shows that the former students are undergoing a continuous deterioration of vision and health, and that the skills learnt by termination are, by no means, permanently adequate in meeting their needs, as these needs increase. A rehabilitation program for these elderly persons must invest in Follow-Up to determine additional needs and provide the additional training in order to protect the initial investment by both students and program. The provision of such additional training is proportionately inexpensive: the cost of selection and intake does not apply, neither does the cost of the initial period of training, when many other services are supplied and when the student is least efficient, since adjustment to the program is still in process. The additional training would take place under optimal conditions, since the student realizes the additional need, and has had a previous successful experience.

The evaluation study required the development of tests for individual skills which, on assessment, proved to be reliable in the hands of persons other than rehabilitation professionals. Recommended systematic routine Follow-Up is, therefore, economically feasible.

In addition to the timely identification of newly developed needs for further training, it is most desirable to obtain routine feed-back of the adequacy and relevance of the training provided. Program modifications could be instituted, and in turn be evaluated, and management decisions would be based on systematic information.

THE OUTREACH PROGRAM

This aspect of the CIL program encountered a number of unanticipated difficulties. The sources of referrals proved to be inefficient in terms of the ratio of those admitted to those referred. The largest proportion of referrals who ultimately "closed" without becoming students were categorized, administratively, as "not interested," while relatively fewer were considered "not eligible." In view of the estimates of potentially eligible individuals in the catchment area, the number referred was quite small: 681 out of an estimated 41,000 in the target areas consisting of New York, New Jersey, Pennsylvania and Connecticut. The apparent reasons for this inability to obtain larger numbers of referrals or applicants are several:

1. The difficulty of reaching a small portion of a very large population: 41,000 persons in a total population of 40,358,000, the estimated population for the four states for 1975.[2]

2. The entry of a new service agency into an area long structured and organized by respected and well-established agencies.[3]

3. The pioneer spirit required of the potential students who had to be willing to try something brand-new without an established "track record," at a time when they were undergoing a devastating trauma most likely to create depression and feelings of hopelessness and helplessness.

4. The initial rigid requirement of becoming a residential student in order to attend CIL. This demonstrably eliminated many who could not contemplate such a drastic change in their lives. Even though it was a temporary change, it was asked of persons who were not used to "institutional" living in their adult lives, and at a time when drastic changes are particularly difficult to make, in view of age and recent visual impairment.

5. Lack of knowledge of the specific predictors of characteristics which would identify suitable and willing students. The criteria which define the target population are too general to select out efficiently those who are not only eligible but also interested. As mentioned before, it was found that a large proportion (63 percent of all referrals) were administratively categorized as either not eligible or not interested. The Follow-Up

study of a sample of those categorized as "not interested" showed that about a quarter of these could not recall having been contacted by CIL. Some of the additional ones were, in fact, not eligible because of vision or health status, and most of the remaining were, indeed, not interested. A very small number said they were interested, but almost none of these did ultimately enroll in the program.

The data available to the evaluation study did not reveal characteristics which might assist in better, more efficient recruitment. Future efficiency of CIL Outreach would undoubtedly be improved if systematic study of such predictors were conducted. A more definitive "profile" of successful referrals would be valuable when working with referral sources, since it would provide more specific criteria of selection for referral from among the various pools of clients.

Some recent changes in the CIL program should overcome some of the reasons for "lack of interest" among otherwise eligible persons. The development of the Self-Study Kits for home use has proven to be successful; there is a demand for the Kits, and some of the elderly blind who are unable to attend CIL, or are not willing to face organized instruction, may either learn by means of the Kits, or become interested in attending CIL after all. The newly instituted program, "Reach", will also assist in a more efficient recruiting effort, since it will establish an in-home educational alternative for potential students and their families. Equally successful should be a third new program, "Second Careers", since it will recruit former successful students as paraprofessional home instructors to serve candidates who do not wish to enter the centralized CIL teaching program.

The relaxation of the residential requirement has already made attendance more accessible to those not willing to enter a residential mode of training. There appears little reason to insist on residential living at CIL while in training. Its value in the training of mature adults seems unsupported. In addition, CIL's limited staff and resources made the residential aspect counterproductive for those residents who felt that their evenings and weekends were quite difficult to bear, since no provision could be made for programs, activities, etc.

The finding that an average of 16 periods per week were being scheduled for students further strengthens the recommendation that the residential aspects of the program be discontinued. Even with increased scheduling of classes and services for students (see recommendation on that aspect below), it seems unlikely that current staffing will permit much fuller scheduling. The resident student facing an average of three periods scheduled a day, cannot be faulted for objecting to under-utilization of the time spent at CIL.

The "diagnostic assessment week" before actual admission quite reasonably appears to be a phase where residence may be beneficial. This week appears to be fully scheduled, and some former students reported experiencing stress during this week. Maintenance of two rooms to accomodate the candidates scheduled for this assessment would be adequate, since CIL tries not to schedule more than two persons for assessment per week.

It is further recommended that the effort to recruit in all the areas of the four states which are beyond reasonable commuting distance be abandoned. Referrals from such distances are expensive to process, frequently the individuals are not interested in residential arrangements, and admissions from these farther areas would also be very expensive, in terms of the routine follow-up recommended above. The metropolitan area contains a large potential population of eligible candidates. More intensive saturation of this more limited population should provide greater visibility for CIL and result in easier Outreach in the future. Such a policy would not automatically rule out accepting an occasional student from other areas who may wish to attend CIL, and who will require residential arrangements to make attendance possible.

THE MANAGEMENT OF CIL

The project called for building a management system which might become a model for management of projects similar to CIL. The system built was successful in several major aspects. Uniquely, it was possible to achieve unduplicated counts of individuals entering the CIL program process from date of referral to disposition or graduation. The characteristics of the referrals were collected carefully whenever the system called for such collection, and it was possible to describe the CIL population in terms of a great many relevant socio-demographic characteristics. It was easily possible to evaluate the selection process and demonstrate that CIL did select, in an unbiased objective fashion, from among the total referred.

There was ample documentation of the individual's progress through the process of selection and intake to the point of final determination as uninterested or not eligible or suitable for admission. The students' progress through the teaching program from the determination of incoming levels of skills to achievements at termination or graduation was not developed to a point where systematic quantification and evaluation could be performed immediately, but the data existed in a format that permitted relatively simple transformation. It is recommended that CIL consider the incorporation of the system of transformation developed by the evaluation study.

Managerial information about scheduling and staff utilization was available, but required basic reformatting before it became suitable for evaluation.

The utilization of staff shows proportionately large involvement in non-teaching activities. In view of the experimental nature of the program's first years, this is understandable, since staff and students were feeling their way towards determination of needs, ability to learn at specific speeds, etc.

The proportion of teaching time to time for other professional services that was obtained by students, was found to be in a ratio of two-to-one. This would appear to be significant finding, since it points to the need of the student population for a considerable volume of services other than direct teaching. It is a part of the total service which must be planned for, and provided, in order to permit a climate which makes it possible for these students to learn. A more conventional "school" approach probably could not be handled by most of these students who have psychological problems which are as severe and significant as those due to lack of "skills."

Among the students, about one-fifth could be termed "unsuccessful" in that they left CIL, having mastered less than half of what they had intended to learn. The battery of screenings and assessments used during the "diagnostic assessment week" are not entirely discriminatory, and at present permit the admission of unsuitable candidates. It is recommended that CIL staff examine these tools and explore the effects of changes.

The completeness of the records permitted the analysis of time spent to obtain levels of achievement. It was found that some students failed to learn anything at all, or very little indeed, despite enormous amounts of effort and time. It could be shown that a cut-off point can be determined for unsuccessful students, and that an "objective" standard can be set when the administration should question the utility of further attendance.

It should be pointed out that CIL's willingness to carry students for varying lengths of time, instead of adhering rigidly to a predetermined time schedule, was precisely the factor which permitted the identification of a "cut-off" point from data rather than untested judgement.

THE UTILIZATION OF THE TEACHING COMPONENT OF THE PROGRAM

The data show that the utilization in absolute numbers of students admitted at any one time, as well as a proportion of their cohort of referrals, was low, and below that which had been postulated as capacity. This is inevitably reflected in the "cost per student" as calculated for total expenses. Routine review of data concerning seasonal and other fluctuations in the numbers of referrals should be instituted so that under-utilization of the teaching component can be minimized. Analysis of cohorts of referrals can be followed and analyzed easily, since the management system has made provision for such an ongoing monitoring operation. Deviations from the expected or required volume of referrals, and the intervals required for processing individuals at different phases can be noticed readily.

It is recommended that ad hoc intensification of Outreach efforts not be resorted to as a means of increasing utilization of the teaching component. Such efforts, in the past, have not resulted in proportional increase in "eligible" and "interested" individuals, but have merely increased the volume of individuals to be processed.

The problem of fuller utilization is not a simple one, since it involves not only obtaining a more effective Outreach at a steady, even rate, but also involves more efficient scheduling of individuals for the services required during the various phases of the process. At present, the time interval required for processing referrals which end in "closure" without admission to the teaching program is well under the expected time period considered acceptable for a large proportion of the referrals. The interval spent in the teaching program, however, is bi-modally distributed, since as many students stay longer as stay shorter periods than expected, with very few staying the expected length of time. The reasons for this bi-modal distribution of length of stay are not clear from the data available. It is recommended that CIL administration examine this problem systematically to locate the source or sources of this phenomenon.

It is expected that if the termination policy discussed above is changed, that the distribution of the length of stay should show a change. The teaching requirements of students, however, will not be evenly distributed among areas, and current scheduling practices will have to be changed.

At present, scheduling the admission of students and scheduling of instruction and other services is handled on a weekly basis. The students occupy "slots," and the number of slots is determined by the postulated capacity of the teaching component. This conceptualization does not take into account the varying teaching needs for individual students which are determined by the program of instruction decided upon for by each student. This factor, in conjunction with the high rate of re-scheduling of classes which was observed, inevitably results in poor utilization of constant teaching and service staff time.

It is recommended that scheduling admissions and teaching time be re-conceptualized from "available student slots" to available tracts of teaching time in specific areas, and that the scheduling unit be shifted from that of a week to a monthly basis.

This would permit a better "fit" of teaching needs of the individual students to the total reservoir of teaching time available. The individual student plan is formulated for a monthly period, and permits reasonable calculation of periods of instruction required in specific areas of instruction for that month. Different student mixes could be accommodated efficiently if their requirements were considered on a monthly rather than on a weekly basis. This might require more flexibility in the order of admitting students, and call for sophisticated management of those waiting to ensure that particular types of students (those with heavy teaching requirements) will not be postponed unreasonably long.

Finally, this type of matching would also permit expeditious replacement of students who either interrupt training, give up areas of instruction, or terminate earlier than anticipated.

COSTING SERVICES

It was found that the current accounting system made it difficult to assess the program costs in other than very general terms, such as the ratio of total expenses per referral or student. There was no way of easily establishing the cost of "successful" and "unsuccessful" students, equally , no way of establishing costs in terms of skills maintained after leaving CIL. The individual students absorb vastly different ranges of instruction and services, and such differences in cost could not be readily established nor, therefore, related to "outcomes".

It is recommended that accounting methods be instituted which would permit isolation of the costs of the various new innovative programs which are currently being carried out, so that the different activities may be evaluated independently from each other. The developmental costs, subsequent income, and the impact of the Self-Study Kits, for example, are worthy of independent assessment.

CONCLUSION

The overall findings permit the statement that CIL has been successful in reaching and involving members of the defined target population. It has succeeded in clarifying the areas in which teaching can, in fact, meet needs of the elderly visually impaired, and that these individuals are capable of benefitting from such learning, that they can continue to live independently and avoid, at best, or delay at worst, institutionalization due to their visual handicap. The experience has been available for analysis and evaluation, since a client-oriented record system was carefully kept.

The basic philosophy of fitting programs to individuals has often been advocated, but CIL has actually succeeded in implementing this approach. The benefits of the approach are difficult to quantify, but the data obtained from the Follow-Up interviews provide qualitative evidence that the students believe that they have derived great benefit from this approach. The care given to the individual was precisely what gave the students the courage and confidence to continue so that they could lead independent lives. The major shortcoming of the program, as constituted at present, is the lack of follow-up which can easily result in the loss of the considerable investment in initial rehabilitation.

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CHAPTER ONE

INTRODUCTION, BACKGROUND AND THE CIL PROGRAM

INTRODUCTION

Blindness, as a handicapping condition, has drawn a comparatively large share of the funds allocated for rehabilitation in the United States. In fiscal year 1967, almost $469 million was spent in the United States on blindness services. In the same year, the number of blind persons in the country was estimated to be between 410,000 and one million.[4] It is not known how many persons in the United States are "blind," in part because of the absence of a universal definition. In its use by those interested in the problems of vision-loss, the term "blind" generally applies to persons with severe visual impairment, as well as to those who cannot see at all. Estimates of the number of blind persons vary widely, but it is generally agreed that there are at least a million people in the United States who are blind or severely visually impaired. The majority of these persons are age 55 or older.[1,5,6,8,9] Although validity of projections based on available data is suspect, such projections anticipate significant increase in the blind population, with greatest increases in the age grouping over 65 years.

Despite their predominance, older persons have received a very small proportion of the services provided to the blind. This problem has been identified and documented for at least ten years.[7,10,11] A study conducted by Scott of the structure and content of services to the blind in the United States concluded that:

> "These data show a clear bias in work for the blind

> in favor of children and employable adults and against elderly blind persons. About 90 percent of agencies in work for the blind place exclusive or primary emphasis upon serving less than one third of the blind population. Only 9 percent of the agencies concern themselves with the bulk of blind persons."12

The unwillingness of agencies for the blind to serve older persons reflects the traditional emphasis in the United States on vocational rehabilitation, and the prevailing age distribution of blindness, when work to serve the blind began; when a majority of the blind were children and adults of working age.

There is considerable interest, at present, in the service needs of older visually impaired persons. The CIL project conducted by the New York Infirmary in cooperation with the United States Department of Health, Education and Welfare, began as a pilot service program for older blind persons. This report deals with the findings of an evaluation of the first four years of this project.

The report is organized into eleven chapters. The first three of these provide an introduction to the CIL project and the evaluation plan. Chapters Four through Ten describe the population referred to and served by the project, the services provided to these persons, and the benefits of CIL services reported by clients. Chapter Eleven discusses conclusions reached about the success of project efforts. This report is primarily concerned with the service needs of older blind persons, and the relative value of providing different types of service. The report also discusses how a program to provide services to older blind persons should be managed.

BACKGROUND

In the second half of the nineteenth century, a group of prominent New York families founded a charitable organization intended to house and care for elderly family servants who had lost their vision. This organization was named the Society for the Relief of the Destitute Blind of the City of New York and Its Vicinity. The Society accepted admissions to its residential home until 1969, when the trustees of this Society merged with the trustees of the New York Infirmary. This merger allowed the home to provide better medical services to its aging population. The merger recognized operational problems of the home, principally the deterioration of the Bronx neighborhood where it operated and a dwindling enrollment. On merging, the Society's trustees became members of the Blindness Fund Committee of the New York Infirmary Board of Trustees.

In 1971, the Board commissioned the consulting firm of Booz, Allen and Hamilton to conduct a study to identify needs of blind citizens not met by existing programs. This study recommended that the Board establish a social rehabilitation training program to serve elderly blind and visually impaired persons - a group comprising the majority of the U.S. blind and visually impaired population, yet receiving only about ten percent of the "blindness" services available. The consulting firm submitted a proposal for developing a service program to meet this goal. The proposal was adopted by the Board of Trustees of the New York Infirmary.

A grant request for planning and initial staffing and equipment costs to implement the plan was submitted to the U.S. Department of Health, Education and Welfare (DHEW). A five year grant was awarded by DHEW on May 1, 1972. The grant was made by the Office of Research and Demonstration, the Administration on Aging, and the Rehabilitation Services Administration. A major element in the award of the grant was the expectation that empirical data would be generated on the service needs of older blind persons, and on the relative efficacy of service strategies to serve this population.

The first of the five grant years was committed to program design and staff recruitment. The service program, named the New York Infirmary Center for Independent Living (CIL), began operation on May 14, 1973. The CIL program identified its target population as blind and severely visually-impaired adults, age 55 or older, residing in the states of Connecticut, New Jersey, New York and Pennsylvania. From the scant data available, it is estimated that the size of the target population is about 41,000 persons.*

The grant proposal identified the investigative emphasis of the CIL project to be on (1) identifying the service needs of older visually-impaired persons, (2) developing service strategies to enable older visually-impaired persons to function independently, and (3) leisure and personal development activities particularly suited to older blind persons. The project, as implemented, delivered leisure or "avocational development" services in an unstructured manner which did not permit systematic monitoring or evaluation. This evaluation report, consequently, will address only the first two investigative concerns.

In October 1976, the Board commissioned the Anarem Systems Research Corporation to conduct an Evaluation Study of the CIL project. The Anarem evaluation has focussed on three investigative domains responsive to grant proposal committments:

1. Characteristics of older, visually-impaired persons served by the program.
2. Usefulness and completeness of training provided

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*This estimate is based on (a) 1970 (latest available) Model Reporting Area prevalence rates for the states of New York, New Jersey and Connecticut, (b) Hurlin's prevalence rate for Pennsylvania of 1.63 per 1,000 population, and (c) 1975 U.S. Census population estimates for the four states: Connecticut, New Jersey, New York and Pennsylvania.

relative to the daily needs of clients.

3. Implications for service program design based on evaluation findings.

An additional dimension has received evaluation attention: rehabilitation program management. Many of the difficulties faced by fund-allocators and policy-makers interested in the visually impaired have to do with the virtual absence of information on the service needs of such persons and on the relative efficacy of strategies to meet these needs. Information on these two aspects is of limited value, however, unless an appropriate concept or model of a service system exists, which can serve as a basis for formulating structural and process changes. Such a model is presented in Chapter Two of this report.

The CIL program included an evaluation research element as an integral component. This element was principally concerned with the development of a management model for rehabilitation, and the design of a computer-based management information system (MIS) to support such a model. These research activities have been discussed elsewhere.[2,3,4] The Program Evaluation described in this report used information produced by the Center's prototype MIS, dubbed CILS (Computer Information Linkage System).

THE CIL REHABILITATION PROGRAM

One of the greatest difficulties in managing and evaluating rehabilitation programs is the absence of clear and uniform definitions as to what rehabilitation services are, and what effect these services are intended to have on rehabilitants. Such difficulties were addressed by CIL, in its first operational year, by constructing a functional definition of its services. In addition, the CIL rehabilitation process was flow-charted to permit monitoring.

Figure 1-1 shows the flow of rehabilitants through CIL, from referral to case closure. The process was divided into a number of segments, called statuses, separated by decision points.

Major case decision points are shown as diamonds. Service statuses, that is, segments in which a client received service at the Center, are shown as rectangles. Waiting list statuses are shown as circles. Closure statuses are shown by "900" codes.

INTAKE

Persons learning about CIL (through outreach functions) are referred to the Center, either by a care provider in the "blindness system"* or by self-referral. After determining that the referred person meets basic criteria, age 55 or older and legally blind,** a home interview between the person referred and a Center social worker is scheduled. At this interview, the psychological data collection instrument is administered and the general interests of the person in the Center's rehabilitation program are explored. If the person is interested in service, a week's stay, "Initial

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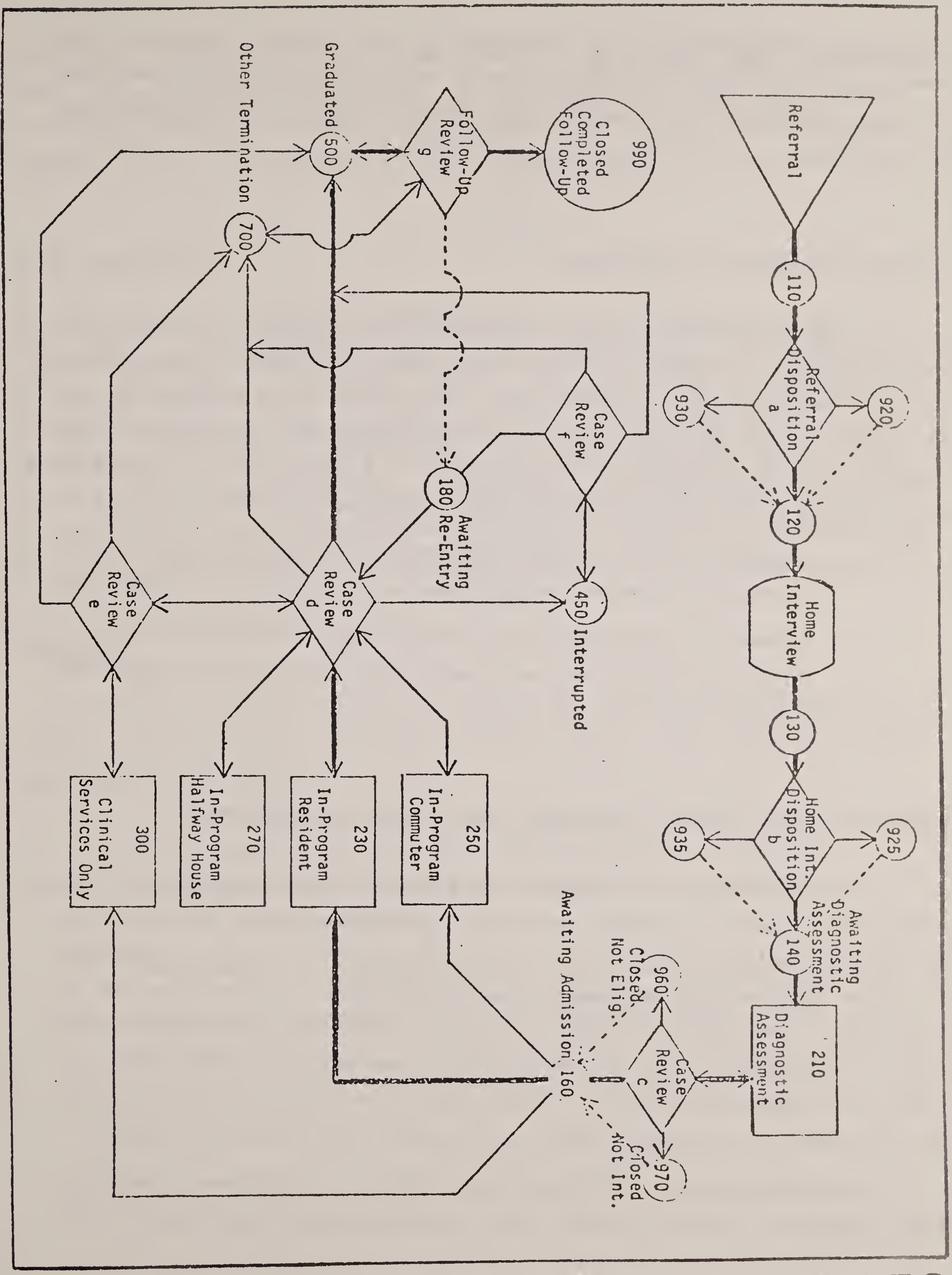
*Throughout this report, "blindness system" is defined as the set of persons who are blind, the set of organizations and institutions who provide services to the blind, the linkages between blind persons and these organizations, and the laws, resources and constraints governing delivery of the services to the blind.

**The definition of blindness used throughout this report is that found in the Social Security Act of 1935, (sometimes referred to as "legal" or "economic" blindness):

> "A person shall be considered legally blind whose central acuity does not exceed 20/200 in the better eye with correcting lenses or whose visual acuity is greater than 20/200 but is accompanied by a limitation in the field of vision such that the widest diameter of the visual field subtends an angle no greater than 20 degrees."

Figure 1-1: FLOW OF REHABILITANTS THROUGH CIL



CILS STATUS CODES

Revised 5/12/75

Diagnostic Assessment), is scheduled at the Center. During this week the candidate's training needs, his eligibility for service, and his interests in entering the Center rehabilitation program are assessed.

INITIAL DIAGNOSTIC ASSESSMENT

In the assessment week, the candidate's needs in instructional, psychological and medical areas are identified and an appropriate rehabilitation plan is developed. This plan is presented to the candidate so he can make decisions regarding the elements of the rehabilitation plan to be implemented. At this point, eligibility for program admission is determined. Admission criteria are:

1) Specific need for and interest in receiving service in three or more rehabilitation instruction areas, and

2) Absence of psychological or medical problems which would prevent the candidate from benefitting from the program.

REHABILITATIVE SERVICE DELIVERY AND PERIODIC ASSESSMENT

After admission, at monthly intervals, the entire staff meets with the student to review progress and to reassess suitability of the rehabilitation plan. The rehabilitation plan is adjusted at these meetings to address changes in needs, identification of new needs, progress or other reasons. The adjusted rehabilitation plan is discussed with the student who makes the final decision about its implementation. Planned services are provided directly by CIL staff or through referral to additional care providers.

The psychosocial and ancillary medical subsystems identify home community resource needs such as homemaker/home health aide services. A plan to meet these needs is developed and implemented. When, at a monthly assessment, it is determined that the student no longer needs or wishes instruction in at least three instructional areas, a "graduation" date (termination) is set.

POST GRADUATION

At program termination the student is linked with the community in a manner that maximizes the use and maintenance of rehabilitation skills acquired. Beyond the explicit functions of the community linkage subsystem, post-graduation services include mobility and activities of daily living training in the student's home. This training is essentially the review of instruction received at CIL and new instruction in adaptive techniques which will enhance the ability of the student to use this training in his home milieu.

FOLLOW-UP

Original plans called for follow-up assessments to be made at annual intervals for a period of three years. The focus of these assessments was to be:

1. The determination of the relevance of training in aiding the student to meet daily needs on return to his home community.
2. Assessment of rehabilitation skill maintenance, and
3. Analysis of cost/benefits of rehabilitating older persons.

CIL PROJECT IMPLEMENTATION

In reviewing the results of the Anarem evaluation of the CIL project, it is necessary to emphasize that, although the "CIL Project" is discussed as an entity for evaluative purposes, this project had not one but many structures and processes at different times.

All projects differ, to some extent, in implementation from the outlines and initial designs of their planners. The CIL project was particularly dynamic in structure, undergoing at least five major re-organizations in its first five years. This dynamism largely reflected a commitment of top project management to respond to implementation experience.

Two functional areas developed substantially less structure than initially planned: a) avocational counseling and, b) community linkage. The fact that these two areas did not fully mature as program elements is to some extent explained by the realization that these were the only CIL services offered which are not traditionally a part of service programs for the blind.

One area not covered by the original plan drew a major share of attention and budget dollars: "self-study kits," which packaged large print manuals and cassette tapes designed for use by blind persons, alone or with the aid of a teacher, in learning adaptive skills. These "self-study kits" have generated considerable interest among visually impaired persons, and workers in the field of blindness.

Another area where implementation experience was at significant variance with design plans was the relationship between the Center and the state blindness agencies in its service region. The original plan assumed a close cooperative relationship with state agencies, and depended particularly heavily on the cooperation of state agencies in referring suitable rehabilitants, and in providing staff to aid the Center in conducting an on-going follow-up program for "graduates." In practice, the establishment of such relationships with the state agencies proved to be most difficult. For the first two years, these agencies made few referrals to the Center, forcing a shift to serving "self-referrals." State assistance with follow-up activity never materialized. The implications for future implementation of CIL-state agency relationships will be discussed later in this report.

In retrospect, as in any such project, it is possible to envision a number of improvements to CIL's operations. This is largely possible because of the wealth of information generated by the "action research" aspect of the program. The Anarem Evaluation focussed on the utility and effectiveness of services provided to clients. Although not a part of our evaluation, a comprehensive assessment would have to consider the value of the implementation knowledge generated by the program. Such consideration is of particular importance in project cost/benefit analysis.

In carrying out a cost/benefit analysis, it should be considered that the value of implementation knowledge generated by the program is likely to be found of more net value than benefits accruing to clients due to services provided. As discussed in Chapter Six, total expenses incurred amount to about $13,000 per student served by the project. Benefits, however, are wider than merely the savings or value to students of the services provided. For example, the teaching materials generated by the project have been found useful enough by workers in the field to generate sales of about $14,000 (over 500 copies of the training kits). Also, the experience of the project in the avocational counseling area allowed the design of a "second career" project which was funded by the New York Community Trust. The knowledge generated by the project can be expected to benefit those wishing to serve the older blind by providing:

- Teaching and other materials
- Methods of service and student need diagnosis
- Methods of management and record-keeping
- Client-centered management information system.

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CHAPTER TWO

A CONCEPTUAL MODEL OF PROGRAM MANAGEMENT

A number of insights were gained from the CIL project for rehabilitation program management. The major aim of this chapter is to present a management model for blindness rehabilitation programs, based on CIL operational and evaluation observations. It is hoped that this will be of value to managers, researchers, and others concerned with serving the older blind. A major expectation of the model is that it will serve as an aid to those wishing to design and implement future programs for serving older visually impaired persons.

It is the fundamental contention of this chapter that a rehabilitation program may usefully be thought of as "manageable." Such a view of a rehabilitation program implies that a limited set of key activities may be identified, which may, in turn, be systematically measured, monitored, and controlled. The view further implies that successful control of this limited set of activities ("minimum necessary activities"), will result in achieving the desired program outcomes.

An underlying belief of this view is that an administrator wishing to make effective use of a program's limited resources is not able to analyze in detail each of the many activities comprising a rehabilitation program. To the extent that one reduces the number of variables to be monitored and controlled by program administrators, the task of management has a greater chance of success in its prime aim: achieving desired outcomes.

A MANAGEMENT MODEL FOR REHABILITATING OLDER VISUALLY IMPAIRED PERSONS

In order to evaluate the management of the CIL program, the approach taken was to develop a conceptual model of a rehabilitation program to serve older visually impaired persons, and comparing this notional model with the actual management of CIL. In this way, it has been possible to identify areas of possible improvement. Beyond its short-term usefulness to the Anarem evaluation effort, this model may be of value to funders, managers, and evaluators of similar programs. The model is, essentially, a statement of the minimum necessary activities of such a program, and the interaction among these activities. A simplified version of the model is shown diagramatically in Figure 2-1. This model may be appropriately described as a refinement of CIL's "Comprehensive Rehabilitation Care Model".

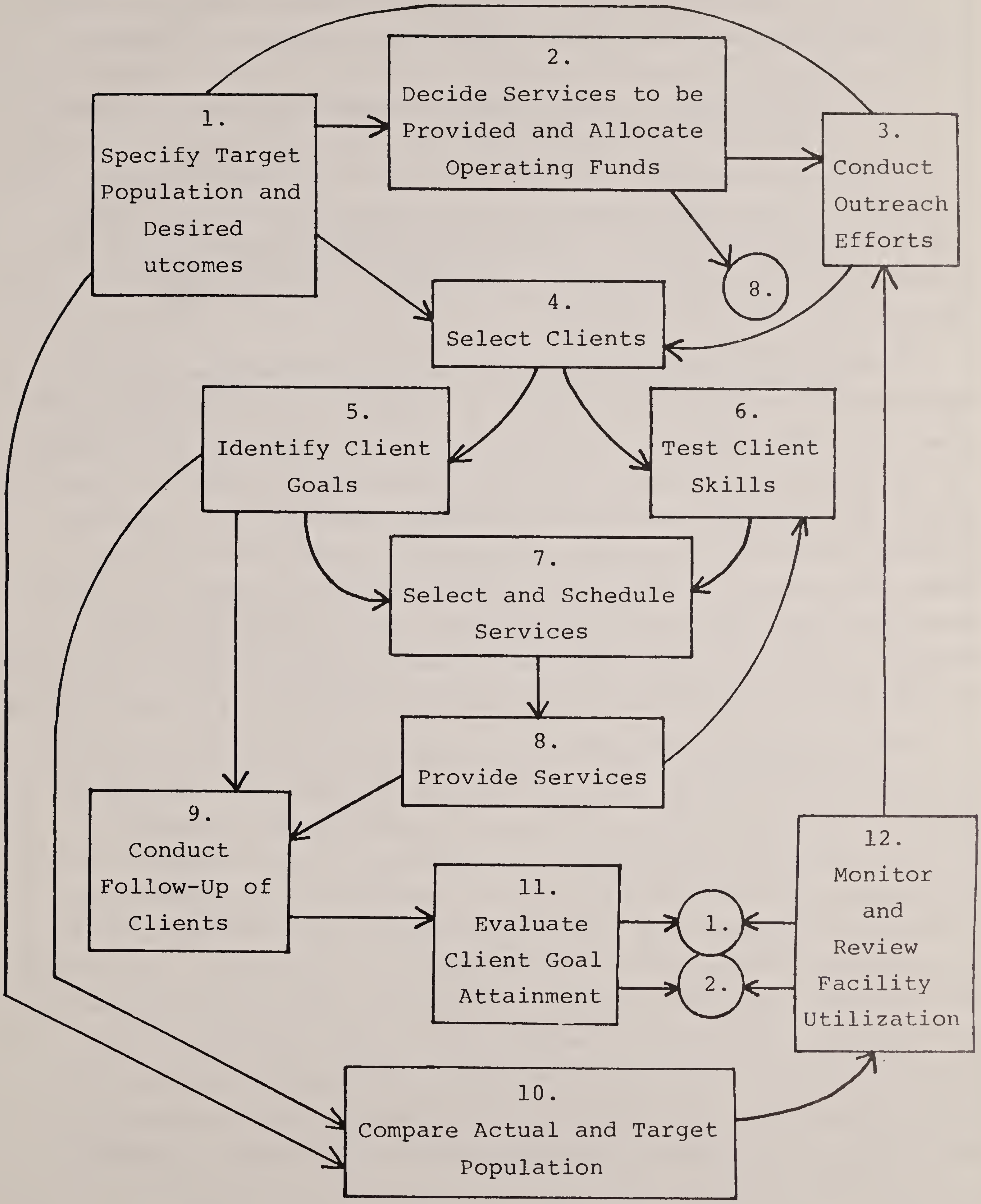
A necessary caveat is that this conceptual management model is not a normative one, but rather intended to stimulate debate on program management, such debate to be a means of sharpening operational management models. While the model reflects, to a significant extent, the judgement of what constitutes a well-managed program, the limited information available makes questionable the validity of this model for settings other than CIL.

The approach taken in evaluating CIL's management is grounded in the work of Checkland[1] and Smyth, and Checkland [2] about modeling as an aid to systems analysis and systems management.

Our management model is comprised of three subsystems: Planning, Service Delivery, and Evaluation. In the model table (Table 2-2), activity numbers are prefixed by a "P", "S" or "E" corresponding to each of the three subsystems. It is not implied that the three subsystems should correspond to three organizational units (e.g., Departments). These subsystems are defined as relevant activity sets for management, not necessarily for administrative organization. The model has been constructed by charting the activities, present or implied, in each of the following subsystem definitions

The Planning subsystem is a policy-making system to allocate

FIGURE 2-1: SIMPLIFIED REHABILITATION MANAGEMENT MODEL


1.
Specify Target Population and Desired utcomes
2.
Decide Services to be Provided and Allocate Operating Funds
3.
Conduct Outreach Efforts
8.
4.
Select Clients
5.
Identify Client Goals
6.
Test Client Skills
7.
Select and Schedule Services
8.
Provide Services
9.
Conduct Follow-Up of Clients
11.
Evaluate Client Goal Attainment
1.
2.
12.
Monitor and Review Facility Utilization
10.
Compare Actual and Target Population

operating funds and to determine:

1) The characteristics of older blind persons to be served.
2) The desired outcomes of providing service, in measureable terms.
3) The services to be provided to these persons, and their relative value or importance.

Planning decisions about services to be provided rely on assumptions about the effectiveness of these services in achieving the desired outcomes. Planning is concerned with groups of clients, or with the population as a whole. Service standard setting is a planning function.

The Service Delivery subsystem is a client-serving system to provide services, selectively, to older visually impaired persons, with the intent of enabling clients to learn adaptive skills in the areas of self-care, mobility and communications, in accordance with planning guidelines and budget constraints. Service Delivery decisions are direct responses to individual clients' needs for service. The Service Delivery system accepts, as given, the objectives and standards formulated by the Planning system. Service Delivery actions will vary from the plan in using initiative to respond to conditions unanticipated in Planning, and due to errors.

The Evaluation subsystem is a cooperation-enhancing system to evaluate the effectiveness of agency services on a continuing basis. Evaluation exists to supply to planners and managers of Service Delivery the requisite information to teach adaptive skills efficiently to older blind persons. Evaluation is a supportive function, concerned with determining whether the Delivery System is achieving planned levels of performance, and whether its actions are realizing desired outcomes. Evaluation seeks to help planners set realistic goals and standards, and to help managers of the Delivery System to achieve these goals. Evaluation seeks to enhance cooperation among managers of different Service Delivery activities, and between Service Delivery and Planning. Ideally

Evaluation serves as a bridge between practice (Delivery) and theory (Planning), enabling Planning to be an adaptive activity.

Evaluation involves two discrete aspects: continuous monitoring of key variables, and discontinuous analyses to respond to specific concerns or problems as they occur. Evaluation tests planning assumptions about the effectiveness of services in achieving outcomes.

Each of the model activities is briefly described below. Chapter Eleven contains a discussion of CIL's program management, based on comparison of the model with actual CIL activities.

In the model table(Figure 2-2), connections (X's) should be read as "This (stub) activity is fundamental to (X'd column) activity."

FIGURE 2-B: MINIMUM NECESSARY ACTIVITIES FOR REHABILITATION MANAGEMENT

	Planning						Service Delivery								Evaluation						
Planning	1	2	3	4	5	6	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
P-1 Specify Target Population		X	X		X	X	X								X						
P-2 Formulate Desired Outcomes			X				X	X				X								X	
P-3 Decide Services to be Provided				X	X	X	X			X	X	X									
P-4 Formulate Service Standards							X	X	X	X	X	X	X	X			X			X	X
P-5 Allocate Operating Funds							X	X	X	X	X	X	X	X			X	X			X
P-6 Conduct Outreach Efforts							X														X
Service Delivery																					
S-1 Select Clients								X	X						X					X	X
S-2 Identify Client Goals										X			X						X	X	X
S-3 Test Client Skills & Capacities										X			X						X		X
S-4 Select Services with Client											X	X				X				X	X
S-5 Schedule Services										X		X					X				X
S-6 Provide Services													X	X		X	X	X		X	X
S-7 Conduct Client Follow-Up														X					X	X	X
S-8 Invoice Paying Agency/Collect Fees					X																X
Evaluation																					
E-1 Compare Target to Actual Population						X	X													X	X
E-2 Compare Selected to Provided Services											X										X
E-3 Monitor Utilization					X	X	X				X							X		X	X
E-4 Cost Services														X						X	X
E-5 Evaluate Client Goal Attainment		X	X							X										X	
E-6 Evaluate Effectiveness (Outcomes)	X	X	X		X																
E-7 Evaluate Efficiency	X	X	X	X	X																

ACTIVITY P-1: SPECIFICATION OF TARGET POPULATION

This Activity Affected By:

E-6 Evaluation of effectiveness
E-7 Evaluation of efficiency

This Activity Fundamental To:

P-2 Formulation of desired outcomes
P-3 Decision of services to be provided
P-5 Allocation of operating funds
S-1 Selection of clients
E-1 Comparison of actual to target population

Description:

Characteristics of clients which the facility wishes to serve are explicitly identified. Any exclusions or limits to be used as screening criteria are identified, such as (but not restricted to):

- Extent of visual impairment
- Length of time blind
- Income limit
- Place of residence
- Age

As evaluative information is produced, both in terms of effectiveness and efficiency, the target population is redefined with the intent of providing service to clients able to benefit most from the program. This is necessary as planning assumptions about the types of clients who most need and most benefit from program services are tested and modified.

It might be useful to regard as clients the relatives or household members of the blind person served, as well as the blind person.

Aims:

1) Promote effective relationships between facility and referral sources.

2) Provide guidelines to outreach efforts.

3) Permit identification and location of target population using statistical data sources (e.g., U.S. Census).

4) Permit evaluation of outreach and client selection.

ACTIVITY P-2: FORMULATION OF DESIRED OUTCOMES IN MEASURED FORM

This Activity Affected By:

P-1 Specification of target population
E-3 Evaluation of client goal attainment
E-6 Evaluation of effectiveness
E-7 Evaluation of efficiency

This Activity Fundamental To:

P-3 Decision of services to be provided
S-1 Selection of cleints
S-2 Identification of client goals
S-6 Provision of services
E-6 Evaluation of outcomes

Description:

The program goals are expressed in a client-centered form; the measurable changes that the program wishes to bring about in its service population as a whole. This activity makes explicit the results that the program seeks to achieve with the target population.

Examples of desired outcomes might include:

- Reduction of social isolation as measured by participation in social activities, time outside the home, and satisfaction with social contacts, etc.
- Enhancement of morale and self-esteem of clients as measured by (for example) psychosocial instruments such as the PGC Scale.*
- Improvement of client's functioning within their families or household units, as measured by attitudes of client and household members.

Aims:

1) To form a basis for program accountability and evaluation.
2) To provide a basis for setting service and other program priorities.

*A discussion of this scale may be found in Lawton.[3]

ACTIVITY P-3: DECIDE SERVICES TO BE PROVIDED

This Activity Affected By:

P-1 Specification of target population
P-2 Formulation of desired outcomes
E-5 Evaluation of client goal attainment
E-6 Evaluation of effectiveness
E-7 Evaluation of efficiency

This Activity Fundamental To:

P-4 Formulation of service standards
P-5 Allocation of operating funds
S-4 Selection of services with client
S-6 Provision of services

Description:

Based on information about the types of clients to receive services, the desired outcomes for the population, and evaluative data, this activity chooses the types of service to be provided and their relative importance or value to rehabilitants. The evaluative data includes assessment of the effectiveness of different services in achieving desired outcomes, and information about the goals with which clients arrive, and the degree of goal attainment achieved by them after returning to their home settings.

Services to be provided include both direct service, and service delivered through referral to additional care providers (see Appendix A). Services to be provided might include:

- Health screening, including opthalmological work-up.
- Orientation and mobility training.
- Activities-of-daily-living training
- Avocational development

Aims:

1) Provision of a basis for allocation of funds, and staffing of program operating units.
2) Orientation of service delivery to outcome achievement.
3) Evolution of unified service strategy, in which the expected contribution of individual services to outcome achievement is specified.
4) Provision of uniform information base to inform rehabilitation candidates and referral services about services offered.

ACTIVITY P-4: FORMULATE SERVICE STANDARDS

This Activity Affected By:

P-3 Decision of services to be provided
E-7 Evaluation of efficiency

This Activity Fundamental To:

S-1 Selection of clients
S-2 Identification of client goals
S-3 Testing of client skills
S-4 Selection of services with client
S-5 Scheduling of services
S-6 Provision of services
S-7 Conducting follow-up
S-8 Invoicing paying agency

Description:

The formulation of service standards states, in performance terms, the management expectation for each of the service delivery activities. These standards are, in effect, managerial definitions of success for each component of the service delivery system. Service standards may take various forms, including (but not limited to):

- Amount of time needed to make decisions or achieve operational objectives, as: time needed to process a referral or teach a particular skill.
- Level of skill which clients, receiving a particular service, are expected to achieve.
- Service provision under specified conditions, as: all clients not totally blind are to receive a low vision examination.

Some standards are usefully expressed as quantification of target values for performance measures of individual service activities (see Activities S-1, S-9, below). Standard-setting needs to be an ongoing activity, responding to evaluative information to adjust standards as required to make them realistic, yet make strides to reach desired outcomes. To be useful as a management tool, these standards must be achievable. It is important to realize that standard setting communicates value judgements of management, and as such, has a real effect on the conduct of the service delivery activities.

Aims:

1) Clear communication of service priorities and minimum expectations to managers of service delivery.

2) Provision of a basis for systematic monitoring of program functioning.

3) Rapid identification of implementation problems, and divergences from planning goals.

ACTIVITY P-5: ALLOCATE OPERATING FUNDS

This Activity Affected By:

P-1	Specification of target population
P-3	Decision of services to be provided
S-8	Invoicing paying agency
E-3	Monitoring utilization
E-6	Evaluation of effectiveness
E-7	Evaluation of efficiency

This Activity Fundamental To:

S-1 through S-6: All service activities
E-4 Costing services
E-7 Evaluation of efficiency

Description:

Based on the size of the target population, and decisions about the services to be provided, operating units need to be funded for staff and other costs. This process needs to take into account evaluative data about the efficacy and efficiency of service delivery units.

Budgeting, or fund allocation, constitutes a statement of program priority. It is important that this priority setting be mindful both of desired outcomes and past operating performance.

During the course of the Anarem evaluation of CIL, it became apparent that Braille Services were of very limited value to the population served. This information was used to re-allocate a significant part of the budget allocation for Braille Services. This is a good example of relating budgeting to evaluative data in a productive way.

Aims:

1) Relation of program budgeting to desired outcomes and evaluation data on historical performance.
2) To make the most effective use of program funds in achieving desired outcomes.

ACTIVITY P-6: CONDUCT OUTREACH EFFORTS

This Activity Affected By:

P-1 Specification of target population
P-3 Decision of services to be provided
E-1 Comparison of actual to target population
E-3 Monitoring utilization

This Activity Fundamental To:

S-1 Selection of clients
E-7 Evaluation of efficiency

Description:

Information about the target population and the available services must be communicated to referral sources and potential self-referrals, in order that referrals be made to the client selection activity.

This needs to be an adaptive activity, responsive to the identified variances between the actual and target populations, and responsive to the proportion of inappropriate referrals from particular sources.

Outreach Activities include tasks such as establishing and maintaining relationships with referring agencies, and advertising through radio, television, or the press. The planning and implementation of an Outreach Strategy are both considered parts of this activity.

Aims:

1) Maximize the proportion of clients referred who are eventually admitted to the program.
2) Maintain a sufficiently large flow of referrals to achieve program utilization targets.

ACTIVITY S-1: SELECTION OF CLIENTS

This Activity Affected By:

P-1 through P-6: All planning activities
S-5 Scheduling of services
E-1 Comparison of actual to target population

This Activity Fundamental To:

S-2 Identification of client goals
S-3 Testing of client skills and capacity

Description:

Client selection is the screening of referrals to choose persons to be admitted to the rehabilitation program. Client selection uses the specifications of the target population, and applicable service standards, as its operating guidelines.

Client selection is the Service Delivery aspect of Outreach Activities, and is functionally coupled with Outreach. Client screening needs to be responsive to the utilization of the facility, by adjusting the rate of processing in response to the available unutilized program slots.

Basic Performance Measures:

- Ratio of successful completions to total admissions
- Percent of admissions meeting criteria of target population
- Ratio of admissions to total referrals
- Percent of weeks having met operating quotas
- Mean time to process referrals
- Mean time from referral to admission
- Percent of reopening cases closed at referral disposition
- Processing cost per referral (activity cost/total admissions)
- Cost per admission (activity cost/total admissions)
- Cost per home interview (interview costs/total home interviews)

ACTIVITY S-2: IDENTIFY CLIENT GOALS

This Activity Affected By:

P-1 Formulation of desired outcomes
P-4 Formulation of service standards
P-5 Allocation of operating funds

This Activity Fundamental To:

S-4 Selection of services with client
E-5 Evaluation of client goal attainment
E-6 Evaluation of effectiveness

Description:

Client goal identification determines the functional aims of students in learning adaptive skills. Client goals are statements of the broad behaviours which increased adaptive skills are expected to make possible for an individual rehabilitant.

Client goal identification can be thought of as a communication device, intended to express desired service outcomes in a client-centered way that emphasizes the broad behaviours which training is to make possible for students, rather than the more narrowly expressed service goals perceived by instructors. For example, a client goal might be "to walk outside, without crossing streets." The instructor might see this as the goal of teaching several mobility skills to a specific proficiency level.

This activity has the short-term concern of ensuring the relevance of instruction and other services provided. An important long-term aim of this activity is understanding why rehabilitants come to a service facility: a marketing type of investigation. Client goal identification seeks to avoid the pitfall of defining client needs solely with reference to the skills which the facility may teach, or other services it may provide. Client goals, however, should be explicitly matched to specific units in the rehabilitation areas curriculum.

Basic Performance Measures:

- Proportion of admissions for whom goals were identified
- Number of clients for whom goals were identified
- Time required for goal identification interview
- Cost of goal identification (goal identification cost/total interviews)

ACTIVITY S-3: TEST CLIENT SKILLS AND CAPACITIES

This Activity Affected By:

P-4 Formulation of service standards
P-5 Allocation of operating funds
S-1 Selection of clients

This Activity Fundamental To:

S-4 Selection of services with client

Description:

Before providing instructional services it is necessary to obtain baseline data on client skill levels. This permits the development of a sound, individualized service plan and the determination of gains brought about by instruction. Tests and examinations are also required to establish the physical and mental functioning of rehabilitation candidates.

It is desirable that such testing be systematic, and use uniform and explicit criteria. Testing is also required to monitor client service plans, and to determine when certain service goals have been achieved.

Basic Performance Measures:

- Number of persons tested, and number of tests given
- Percent of students tested before training
- Time required for testing
- Cost per test (testing costs/total tests given)

ACTIVITY S-4: SELECT SERVICES WITH CLIENT

This Activity Affected By:

P-3 Decision on services to be provided
P-4 Formulation of service standards
P-5 Allocation of operating funds
S-2 Client goal identification
S-3 Client skill testing
S-5 Scheduling of services

This Activity Fundamental To:

S-5 Scheduling of services with client
S-6 Provision of services to client
E-2 Comparison of actual with target population

Description:

On the basis of identified client goals, client level of skill, and client preference, a service plan is defined. Such a plan is largely predetermined by planning decisions about services to be offered. To the extent, however, that budget allocation permits, clients may be referred outside of the agency for required services not delivered internally. Selection of services for client needs to take into account availability of service slots, in order to maximize facility utilization.

It is one of the functions of the service selection system to terminate clients when skill testing shows that target achievements have been obtained. Failure to achieve level of progress agreed to with the client is also a criteria for termination. Of course, on the basis of initial skill test results, the selection made might be not to provide any service.

Basic Performance Measures:

- Time from testing/goal identification to scheduling requests
- Percent of service plan not completed
- Percent of skills taught used on return home
- Selection cost (selection cost/total admissions)
- Proportion of scheduled periods cancelled by students

ACTIVITY S-5: SCHEDULE SERVICES

This Activity Affected By:

P-3	Decision on services to be provided
P-4	Formulation of service standards
P-5	Allocation of operating funds
S-4	Selection of services with client
S-5	Determination of available slots
E-2	Comparison of selections to provide services
E-3	Utilization of monitoring

This Activity Fundamental To:

S-1	Selection of clients
S-6	Provision of services
E-2	Comparison of selected/provided services
S-4	Selection of services with client

Description:

This activity is concerned with scheduling of intake services (such as home interviews) and program services. It includes setting of admission and termination dates, as well as specific training services.

After services are selected for an individual client, scheduling requests must be processed and actual schedules prepared.

An important output of the scheduling function is information to Client and Service Selection activities about available (that is, schedulable) service slots. This feed-forward information seeks to sensitize Client Selection and Service Selection activities to the need for maintaining a high level of utilization.

Basic Measures of Performance:

- Time required to process schedule requests
- Scheduling costs per student (scheduling costs/total admissions)
- Balance of service load (evenness of demand on resources)
- Utilization rate
- Percent of weeks during which utilization standards are met
- Mean scheduled periods per student/week

ACTIVITY S-6: PROVISION OF SERVICES

This Activity Affected By:

P-2 Formulation of desired outcomes
P-3 Decision of services to be provided
P-4 Formulation of service standards
P-5 Allocation of operating funds
S-4 Selecting services with client
S-5 Scheduling of services

This Activity Fundamental To:

S-8 Invoicing of paying agency
E-2 Comparison of selected/provided services
E-3 Utilization of monitoring
E-4 Costing of services
E-6 Evaluation of effectiveness
E-7 Evaluation of efficiency

Description:

Service provision accepts the schedule as a plan. The identified client goals and current skill profile are used to set short-term service objectives (units to be learned).

Basic Performance Measures:

- Percent of periods rescheduled
- Percent of cancelled periods
- Proportion of selected services delivered
- Skill gains
- Extent of maintenance of skill on return home
- Average periods per unit learned
- Cost per service hour (service cost/actual student-hours)
- Time from admission to termination

ACTIVITY S-7: CONDUCT CLIENT FOLLOW-UP

This Activity Affected By:

P-4 Formulation of service standards
P-5 Allocation of operating funds
S-2 Identification of client skills
S-3 Testing of client skills
S-6 Provision of services

This Activity Fundamental To:

S-8 Invoicing of paying agency
E-5 Evaluation of client goal attainment
E-6 Evaluation of effectiveness
E-7 Evaluation of efficiency

Description:

One of the assumptions of the model is that services to this population should be thought of as an on-going rather than one-time effort. Follow-up is the visitation of students in their home settings to determine if any further services are required, due to deterioration of vision or health, or due to changes in living arrangements. At follow-up visits, data is collected for evaluation activity.

The literature suggests that blindness agencies should "disengage" from clients after service, allowing them to leave "blind society" and re-enter mainstream life. For the aged population characterized by deteriorating vision and health, however, it is desirable to envision an on-going relationship through follow-up activity.

Basic Performance Measures:

- Proportion of terminations followed-up
- Mean time from termination to first follow-up
- Mean time between follow-up visits
- Cost per follow-up visit
- Percent of follow-up visits cancelled
- Percent of follow-up visits re-scheduled

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ACTIVITY S-8: INVOICE PAYING AGENCY

This Activity Affected By:

P-4 Formulation of service standards
P-5 Allocation of operating funds
S-6 Provision of services
S-7 Conducting client follow-up
E-4 Costing services

This Activity Fundamental To:

P-5 Allocation of operating funds
E-7 Evaluation of efficiency

Description:

A variety of government funds are available for partial covering of service costs, and of materials and equipment provided to rehabilitants. Based on service costing, and actual service delivered, invoices need to be submitted to paying agencies and funds must be collected.

Basic Performance Measures:

- Time from service delivery to invoicing
- Time from invoicing to collection
- Percent of costs recovered
- Amount of uncollected invoices, expressed as service days
- Collectible funds lost due to tardy invoicing

ACTIVITY E-1: COMPARE TARGET TO ACTUAL POPULATION

This Activity Affected By:

P-1 Specification of target population
S-1 Selection of clients

This Activity Fundamental To:

P-6 Conducting outreach efforts
S-1 Selection of clients
E-6 Evaluation of effectiveness
E-7 Evaluation of efficiency

Description:

Characteristics of persons referred need to be monitored to determine any differences between actual and target population, and between persons served and persons screened out. This information permits identification of informal or unplanned screening mechanisms and aids in taking corrective action through Outreach and Client Selection.

In carrying out this activity, it is necessary to analyze process and administrative information along with socio-demographic and other client characteristics.

Aims:

1. Provide information to Outreach and Client Selection to aid in conforming to planning guidelines or target population.
2. Identify sources not referring according to guidelines, for Outreach attention.
3. Identify characteristics of clients screened out to aid in formulating statements of unmet needs of blind population.
4. Maximize efficiency of Client Selection, that is, obtain highest possible proporation of referrals which become admissions.

ACTIVITY E-2: COMPARE SELECTED TO PROVIDED SERVICES

This Activity Affected By:

S-4 Selection of services with client
S-5 Scheduling of services
S-6 Provision of services

This Activity Fundamental To:

S-5 Scheduling of services
E-7 Evaluation of efficiency

Description:

Many factors may cause a failure to provide services scheduled for an individual client, such as staff or client absence or administrative oversight. This activity is concerned with identifying variance from service plan in a timely enough manner that corrective action may be taken by scheduling and service provision.

Aims:

1. Minimize failure of Service Delivery subsystem to follow plans it develops for individual clients.

2. Assist Service Delivery subsystem in meeting service plan for individual clients.

3. Identify organizational or procedural problems in delivering service (by analyzing frequency of types of failure to deliver planned service).

ACTIVITY E-3: MONITOR UTILIZATION

This Activity Affected By:

P-4	Formulation of service standards
P-5	Allocation of operating funds

This Activity Fundamental To:

P-5	Allocation of operating funds
P-6	Conducting of outreach efforts
S-1	Selection of clients
S-5	Scheduling of services
E-4	Costing service
E-7	Evaluation of efficiency
E-6	Evaluation of effectiveness

Description:

Utilization monitoring quantifies the extent to which available program services have been used, and identifies the administrative sites of utilization problems. Utilization review must include both feedback (historical) and feed forward (predictive) reports. Feed forward reporting is used by administrators to take corrective action in the face of projected under-utilization.

Information about the administrative sites of utilization problems is as important as utilization statistics. In responding to predicted under-utilization, for example, it would be helpful for an administrator to know whether the cause was insufficient volume of referrals in Client Selection, poor Service Scheduling, or both.

Aims:

1. Maximize facility utilization, in part by sensitizing Service Scheduling to the need for high utilization.
2. Identification of seasonal or other cyclic variations to aid in planning of Outreach and Client Selection activities.
3. Compare resource use with resource allocation, to aid in making budgetary adjustments.

ACTIVITY E-4: COST SERVICES

This Activity Affected By:

P-5 Allocation of operating funds
S-6 Provision of services
E-3 Monitoring of services

This Activity Fundamental To:

S-8 Invoicing paying agency
E-6 Evaluation of effectiveness
E-7 Evaluation of efficiency

Description:

Determining the cost of providing program services is of obvious utility. The organizational chart of accounts must be set up in an appropriate manner to permit costing of particular activities in a way relevant to managers and planners. Utilization monitoring data must be provided to the costing function, to adjust variable costs. Data on services provided to individual clients is used by Service Costing to determine costs to the agency for serving each client.

It is necessary to separate short and long term costs, especially in the developmental stages of a new service or product.

Aims:

1. Provide managers with accurate information on costs of different services, and costs of serving individual students.

ACTIVITY E-5: EVALUATE CLIENT GOAL ATTAINMENT

This Activity Affected By:

S-2 Identification of client goals
S-3 Testing of client skills
S-7 Conducting client follow-up

This Activity Fundamental To:

P-2 Formulation of desired outcomes
P-3 Decision of services to be provided
S-4 Selection of services with client
E-6 Evaluation of effectiveness

Description:

This activity compares client goals, identified during service, with follow-up data to determine degree of attainment. This information is passed to Effectiveness Evaluation for comparison with ervices- rovided data, in order to test planning assumptions about suitability of services for different client goals.

Aims:

1. Improve relevance of selected services to identified client goals.
2. Provide rehabilitant-centered input to effectiveness evaluation.
3. Provide client-centered input to formulation of desired program outcomes, and decision on services to be provided.

ACTIVITY E-6: EVALUATE EFFECTIVENESS (OUTCOMES)

This Activity Affected By:

P-2	Formulation of desired outcomes
P-4	Formulation of service standards
S-1	Selection of clients
S-2	Identification of client goals
S-4	Selection of services for clients
S-6	Provision of services
S-7	Conducting client follow-up
E-1	Comparison of target to actual population
E-4	Costing services
E-5	Evaluation of client goal attainment
E-3	Utilization of monitoring

This Activity Fundamental To:

P-1	Specification of target population
P-2	Formulation of desired outcomes
P-3	Decision of services to be provided
P-5	Allocation of operating funds

Description:

An essential activity to the successful management of the program is the continuous assessment of whether the desired outcomes identified by planning are being attained by the population served. Effectiveness issues include these questions: . Did meeting service standards achieve desired outcomes? . Did strategies other than those planned prove equally or more effective in achieving desired outcomes? . Why were desired outcomes not realized?

Effectiveness evaluation aids both in controlling and reconfiguring the program to achieve outcomes, and where necessary, to redefine standards and outcomes desired in the light of implementation experience.

Aims:

1. Assist planners in making decisions about services to be provided, and funds allocated, that enhance attainment of desired outcomes.
2. Identify characteristics of population best able to benefit from services, and redefine target population accordingly.
3. Identify program elements or goals requiring redefinition.

ACTIVITY E-7: EVALUATE EFFICIENCY

This Activity Affected By:

P-4	Formulation of service standards
P-5	Allocation of operating funds
P-6	Conducting outreach efforts
S-1	Selection of clients
S-2	Identification of client goals
S-3	Testing of client skills
S-4	Selection of services for client
S-5	Scheduling of services
S-6	Provision of services
S-7	Conducting client follow-up
S-8	Invoicing paying agency
E-1	Comparison of target to actual population
E-2	Comparison of saelected to provided services
E-3	Utilization of monitoring
E-4	Costing services

This Activity Fundamental To:

P-1	Specification of target population
P-2	Formulation of desired outcomes
P-3	Decision of services to be provided
P-4	Formulation of service standards
P-5	Allocation of operating funds

Description:

Efficiency evaluation continuously determines the costs of achieving outcomes. Efficiency evaluation can look solely at the time and resources used,or it may consider costs with reference to benefits/effectiveness. Efficiency issues include: . How well are resources being used? . Can the same results be obtained at lower cost? . How does the cost/benefit of present strategies compare with alternatives?

Efficiency evaluation also monitors compliance with service standards.

Aims:

1. Enhance the ability of the project to make the best use of resources.
2. Ensure relevance and appropriateness of service standards.
3. Identify program areas requiring planning attention.

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CHAPTER THREE

THE EVALUATION PLAN AND THE DATA SOURCES

The evaluation concerned itself with several aspects of the CIL programs:

1) Administration
2) Utilization of the Staff
3) Services provided
4) Characteristics of the population reached by CIL
5) Students:
    a. Characteristics
    b. Needs at enrollment
    c. Accomplishments at leaving CIL
    d. Long-term accomplishments and needs
    e. Attitudes and opinions of CIL

Data for all items except 5-d and 5-e were available in the array of records kept by CIL. An interview was conducted with those CIL students who had left by October 15, 1976. The interview contained two sections, one a questionnaire and the second a series of "tasks" the respondent was asked to perform so that current levels of skill could be evaluated. In the case of respondents who had to be interviewed by telephone, questions were substituted for the "tasks." Following is a detailed description of the data sources.

1) Administration

The recruitment, processing and intake flow of potential students were analyzed by utilizing data from the referrals' and students' records stored by CILS, the CIL systems computer. It consisted of the dates at which individuals moved from one step of the process to the next, and permits analysis of the program over the life of CIL.

2) Utilization of the Staff

All staff turns in weekly time sheets which report specific activities for each of the periods for the working days. These reports were available in their original form, and required coding so that they could be tabulated and analyzed. The weeks covered by time sheets extended from January 28, 1974, to October 11, 1976, the week ending October 15th, the cut-off point for the evaluation. Weeks from the opening of the teaching program until January 28, 1974, had to be omitted since no time sheets had been designed in the beginning. A total of 142 weeks is contained in the period for which time sheets were available. Seven of these weeks do not have time sheets, four represent the end of the year two-week period when students do not attend CIL and no time sheets are completed, one week was devoted to evaluation of applicants (March 24, 1975), and records for two other weeks could not be located, one for 1974, the other for 1975.

It was decided to pull a sample of time sheets and code the information in great detail, and 30 weeks were selected at random, representing slightly over one-fifth (or 22 percent) of the 135 weeks available. The remaining 105 weeks' time sheets were coded in less detail, but contained the same basic information as to the type of activity. The details omitted were the level of subjects taught, and the number of students present at a class. The professional staff, during this entire period, included 26 persons: 23 full-time and three part-time, not including the interns and substitutes.

3) The Population

The individuals who are referred to CIL, or establish contact with it, are evaluated for eligibility and interest by means of initial screening, a home visit when an extensive structured questionnaire is administered, and a first evaluation of needs and physical, psychological and intellectual capacity is made. Candidates are dropped or drop out at each of these successive steps and, consequently, varying types of data exist for them. The date for the referrals and candidates are computerized and were utilized as they exist.

4) Students

a. Characteristics

Characteristics relating to socio-demographic aspects of the referrals and students were obtained from the computer files. These describe the individuals at the time of data collection. Source of referral, visual disability, attitudes towards "blindness", self-assessment of health, previous experience with agencies for the visually handicapped, and other such characteristics, all stem from these computer files.

b. Needs at Enrollment

The records of those who had a "diagnostic assessment" contain evaluation forms for each of the instructional areas offered at CIL. (These forms had not been developed during the early phase of the program. Thus forms were completed for the early students based on information coming from notes kept by the staff.) The record permits the classification of specific skills as:

- known already
- needing brushup only
- knowing none

- knowing partially
- not relevant/not recommended
- not wanted by student

A total of 36 skills is available since various general subjects have different levels or discreet areas. For example, ADL contains five areas, Braille Reading and Writing each have three levels, etc. Needs as well as wishes of the students can therefore be coded, tabulated and analyzed.

c. Accomplishments at Leaving CIL

The same forms are utilized to record progress at monthly intervals during student evaluations. These forms were available for coding, and it was possible to establish whether any given skill had been learnt completely, partially, or not at all; whether it had been dropped, not taught though originally planned for, or not reached because a previous level status prevented reaching it. In addition, the instructors' time sheets made it possible to code the number of periods of instruction for each subject given to the individual students. Periods of contact with students for counselling, or sessions with social workers, medical personnel, community liaison workers, etc., could also be coded. Finally, cancelled classes could be established from the timesheets. The individual student's consumption of staff time was, therefore, made available.

d. Long-Term Accomplishments and Needs

A follow-up interview was designed which consisted of two sections, and was to be administered to the 138 individuals who had been students, and had left by October 15, 1976. One section consisted of a series of "tests" which the interviewers administered to the respondents. The individual tests covered two levels of ADL; two electronic devices; two levels of "Braille Aids: (CIL jargon for telling time, differentiating coins and bills, using the phone, etc.); caring for personal possessions; two levels of O&M; three levels each of Braille Reading and Writing; four levels of Script; and finally three levels of Typing. In addition, eye contact and orientation within a room were evaluated by interviewer observation.

In order to administer the tests, the interviewers were supplied with a kit containing:

- A Braille clock
- Testing tape for the tape recorder
- A Talking Book record
- Samples of Braille to test reading skill
- a knife and a cucumber to test "slicing a vegetable" skill
- Coffee and powdered drink mix to prepare coffee or a cold drink
- Braille slate and stylus with Braille paper and other paper to text Script.

A version of the "tests" for telephone interviews was developed, but the two observations had to be omitted. The data obtained by questions are not, of course, strictly comparable to those obtained by the actual tests, and this should be borne in mind when interpreting this part of the findings present in this report.

The content of each test was designed in consultation with CIL staff and the final version approved by them. Interviewers received a list of tests to be administered for each specific respondent. This list was prepared from the data available from the evaluation sheets. Instructions directed the interviewer to "test" a lower level in a given area if the respondent could not perform at the level indicated. Similarly, the telephone version required such "follow-up" questions.

e. Attitudes and Opinions About CIL

A questionnaire was constructed to establish any changes in relevant areas which would assist in the interpretation of the findings from the battery of tests. These were changes in health and vision status, living arrangements, etc. Primarily, the questions were focused on the respondent's evaluation, opinions about, and attitudes toward, the CIL experience. Also, a shortened version of the questions relating to attitudes about being "blind" was administered. This essentially repeats the items asked at the home interview during the early stages of the admission process.

THE INTERVIEWERS AND CODERS

The interviewers were carefully selected, and had the following backgrounds:

- One MSW working with foster children
- One clinical psychologist
- One social survey professional
- One graduate student in sociology
- One professional trained in rehabilitation of the hard of hearing
- Two highly skilled and experienced interviewers from a leading research organization

These interviewers were trained at two sessions in addition to the training session with CIL staff. They received a total of 16 hours orientation and training. Materials concerning visual handicaps, skills taught, and questionnaire instructions were developed for the interviewers. A supervisor, also trained for this assignment, was available during the entire interviewing period.

Coders were supervised by staff. After codes were built, coders were trained and a 100 percent check of their first coding done. This check was reduced to 50 percent for a second set amount of coding. After this was satisfactory, a systematic percentage was checked. This percentage varied according to the difficulty of the individual codes. The original codes were subject to change until they could be applied to the data without conceptual problems.

THE POPULATION TO BE INTERVIEWED

A total of 681 individuals had been referred to CIL by the cut-off date, October 15, 1976. Table 3-1 shows the major categories.

TABLE 3-1

CATEGORIES OF REFERRALS TO CIL BY OUTCOME OR CURRENT STATUS

Current Status	Number	Percent
Not interested	339	49.8
Not eligible	92	13.5
In selection process	72	10.6
Admitted, not graduated by 10/15/76	37	5.4
Training completed during evaluation	1	0.1
Died while attending	2	0.2
Graduated or left by 10/15/76	138	20.3
TOTAL*	681	100.0

*Due to rounding, percentage totals may not add to exactly 100.0%.

The 138 who had left CIL by October 15, 1976, were the group to be interviewed. The results of the field work are shown in Table 3-2.

TABLE 3-2

RESULTS OF FIELD WORK PHASE

Results	Break Down	Total Number	Percent
Interviewed		121	87.7
In person	91		
By telephone	30		
Not interviewed		17	12.3
Dead	7		
Too ill	2		
Senile	1		
Psychotic*	1		
Hearing too Poor	1		
Out of country	1		
Cannot trace	2		
Eliminated**	2		
TOTAL***		138	100.0

* Individual was clinically diagnosed and admitted to a mental hospital.

** These were eliminated because they had almost no instruction and had indicated no serious intention to learn.

*** Due to rounding, percentage totals may not add to exactly 100.0%.

The non-completion rate was 12.3 percent. The telephone interviews were resorted to for all those who lived either beyond the metropolitan commuting area of New York City, or not within one-and-a-half hours driving distance from the closest interviewer. They also included five persons who live within the metropolitan commuting area, but for whom convenient personal interviews could not be arranged. In two of these cases the respondents did not want visitors in their home.

The following materials can be obtained upon request from the CIL:

- the questionnaire
- tasks and telephone version of the tasks
- kit inventory
- questionnaire specifications
- assignment of test forms

- appointment sheet
- break-off sheet
- CIL's letters (two versions) to respondent
- additional materials for the training of interviewers
- details of the three training sessions
- background materials for interviewers
- reports on the inter-observer reliability of the interviewers' observations and evaluations of the tasks
- the details contained in skills for subjects as developed by CIL staff

CHAPTER FOUR

THE POPULATION

THE REFERRALS

As of May 31, 1977, 681 individuals had approached, or had been approached by CIL, and had been entered into the selection process which is designed to identify those in need of, who appeared able to cope with and benefit by, the offered teaching program.

The official state agencies in New York, New Jersey, Connecticut and Pennsylvania had been approached, and cooperated by screening their client files and referring candidates. Voluntary agencies for the blind, medical and health facilities and individual professionals also were informed, as well as referred individuals. As time went on, publicity brought individual "self-referrals," and other agencies also participated. As the intake personnel worked with these applicants, some individuals either withdrew because they decided they were "not interested," some were "not eligible" for admission, and some were admitted.

Table 4-1 shows the entire experience, as of October 15, 1976, when 72 individuals were in the admission process, 173 had been admitted, 339 had decided they were not interested, and 92 had not met eligibility requirements. These four groups represent about 11, 26, 50 and 13 percent respectively. The State Commissions account for about half (51.8%) of all referrals. Over time, self-referrals have amounted to the next largest source of candidates, while each of the other sources have contributed relatively small numbers.

The finding that about half the referrals prove not to be

TABLE 4-1: THE OUTCOMES OF REFERRALS BY SOURCES OF REFERRAL

Referral Source	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
State Agencies	353	51.8	34	47.2	79	44.4	194	57.2	46	50.0
Self	95	14.0	7	9.7	42	23.6	35	10.3	11	12.0
Friends & Relatives	67	9.8	8	11.1	17	9.6	30	8.8	12	13.0
Health & Medical Orgs.	55	8.1	11	15.3	13	7.3	23	6.8	8	8.7
Agencies for the Blind	38	5.6	4	5.6	14	7.9	18	5.3	2	2.2
Agencies for the Aged	30	4.4	1	1.4	9	5.0	15	4.4	5	5.4
Community Agencies	26	3.8	4	5.6	1	0.6	16	4.7	5	5.4
CIL Graduates	9	1.3	1	1.4	-	-	5	1.5	3	3.3
CIL Staff	8	1.2	2	2.8	3	1.7	3	0.9	-	-
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

*Due to rounding, percentage totals may not add to exactly 100.0%.

seriously interested when they learn about the nature of the program led to an examination of how well the official agencies selected referrals. CIL staff must expend time and resources in conscientious handling of each potential candidate for admission, and a knowledgeable referral system would contribute to CIL's efficiency. Table 4-2 shows the effectiveness of selecting suitable candidates for the referral sources. CIL staff, not surprisingly, does best in suggesting CIL to potential students, and self-referrals appear to be relatively good at self-selection. The state agencies, sending the largest number of candidates appear not to screen these individuals carefully; almost 70 percent do not become students.

Table 4-3 shows the data for the individual state agencies. Connecticut, which sent nine percent of all state agency referrals, had the largest proportion of admissions with about 62 percent. Pennsylvania and New Jersey not only referred very few cases, but did not appear to screen any more successfully than did the New York agency offices.

GEOGRAPHIC ORIGIN

Three-quarters of the referred lived in New York City, about eighty percent in the New York metropolitan area, while the remaining came from upstate New York, New Jersey, Connecticut, Pennsylvania, and a few from other states. The proportion of persons from New York City and State has increased over time, as is seen by the concentration shown for the most recent referrals who are contained in the category of "those still in the process." Table 4-4 shows the data for geographic origin.

CHARACTERISTICS OF REFERRED

Sex and age distributions are shown in Tables 4-5 and 4-6.

TABLE 4-2: THE OUTCOMES OF REFERRALS FROM SOURCES OF REFERRAL

Referral Source	Total		Waiting List		Admitted		Not Interested		Not Eligible		Total Unsuccessful	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
State Agencies	353	100.0	34	9.6	79	22.4	194	55.0	46	13.0	240	68.0
Self	95	100.0	7	7.4	42	44.2	35	36.8	11	11.6	46	48.4
Friends & Relatives	67	100.0	8	11.9	17	25.4	30	44.8	12	17.9	42	62.7
Health & Medical Org.	55	100.0	11	20.0	13	23.6	23	41.8	8	14.5	31	56.3
Agencies for the Blind	38	100.0	4	10.5	14	36.8	18	47.4	2	5.3	20	56.7
Agencies for the Aged	30	100.0	1	3.3	9	30.0	15	50.0	5	16.7	20	66.7
Community Agencies	26	100.0	4	15.4	1	3.8	16	61.5	5	19.2	21	80.7
CIL Graduates	9	100.0	1	11.1	-	-	5	55.6	3	33.3	8	88.9
CIL Staff	8	100.0	2	25.0	3	37.5	3	37.5	-	-	3	37.5
TOTAL*	681	100.0	72	10.6	178	26.1	339	49.8	92	13.5	431	63.3

TABLE 4-3: THE OUTCOMES OF REFERRAL FROM THE FOUR STATE AGENCIES

State Agencies For The Blind	Total		Waiting List		Admitted		Not Interested		Not Eligible		Total Unsuccessful	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
New York	303	100.0	33	10.9	56	18.5	174	57.4	40	13.2	214	70.6
Connecticut	32	100.0	1	3.1	20	62.5	9	28.1	2	6.3	11	34.4
New Jersey	10	100.0	-	-	2	20.0	6	60.0	2	20.0	8	80.0
Pennsylvania	8	100.0	-	-	1	12.5	5	62.5	2	25.0	7	87.5
TOTAL*	353	100.0	34	9.6	79	22.4	194	55.0	46	13.0	240	68.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 4-4: GEOGRAPHIC ORIGINS OF REFERRALS BY OUTCOMES

Residence	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
New York City	529	77.7	61	84.7	113	63.5	281	82.9	74	80.4
Metropolitan NY Area	55	8.1	5	6.9	25	14.0	18	5.3	7	7.6
Rest of NY Area	36	5.3	4	5.6	15	8.4	15	4.4	4	4.3
Pennsylvania	6	0.9	-	-	-	-	4	1.2	2	2.2
Connecticut	28	4.1	2	2.8	12	6.7	12	3.5	2	2.2
New Jersey	13	1.9	-	-	3	1.7	7	2.1	3	3.3
Other States	12	1.8	-	-	10	5.6	2	0.6	-	-
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

TABLE 4-5: SEX DISTRIBUTION OF REFERRALS BY OUTCOME

Sex	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Male	296	43.5	28	38.9	80	44.9	149	43.9	39	42.4
Female	372	54.6	39	54.2	98	55.1	182	53.7	53	57.6
No Information	13	1.9	5	6.9	-	-	8	2.4	-	-
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 4-6: AGE DISTRIBUTION OF REFERRALS BY OUTCOMES

Age (Years)	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
≤ 44	8	1.2	-	-	-	-	-	-	8	8.7
45 - 49	5	0.7	-	-	1	1.6	-	-	4	4.3
50 - 54	42	6.2	3	4.2	14	7.9	14	4.1	11	12.0
55 - 59	108	15.9	9	12.5	25	14.0	64	18.9	10	10.9
60 - 64	131	19.2	23	31.9	33	18.5	61	18.0	14	15.2
65 - 69	111	16.3	9	2.5	39	21.9	51	15.0	12	13.0
70 - 74	88	12.9	12	16.7	31	17.4	38	11.2	7	7.6
75 - 79	95	14.0	6	8.3	21	11.8	58	17.1	10	10.9
80 - 84	71	10.4	9	12.5	13	7.3	39	11.5	10	10.9
85 - 89	18	2.6	1	1.4	1	0.6	10	2.9	6	6.5
≥ 90	4	0.6	-	-	-	-	4	1.2	-	-
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

There are more women than men in this population, which reflects the differential distribution among the United States population of the elderly. This distribution holds for both the "not interested" and "not eligible" categories, and it may be concluded that sex is not a factor in the decision to seek training among the elderly visually handicapped.

The age distribution, shown in Table 4-6, ranges very widely from those under 45 to over 90 years of age, and Figure 4-1 presents the age distribution of the total population and of the admissions. The referrals are proportionately younger. The students peak at 65-69 years of age at referral, while the total referral group peaks at 60-64 years. Age, except for the very young (ineligible because of age), and the very old, does not act as a selection factor in the decision to become a student.

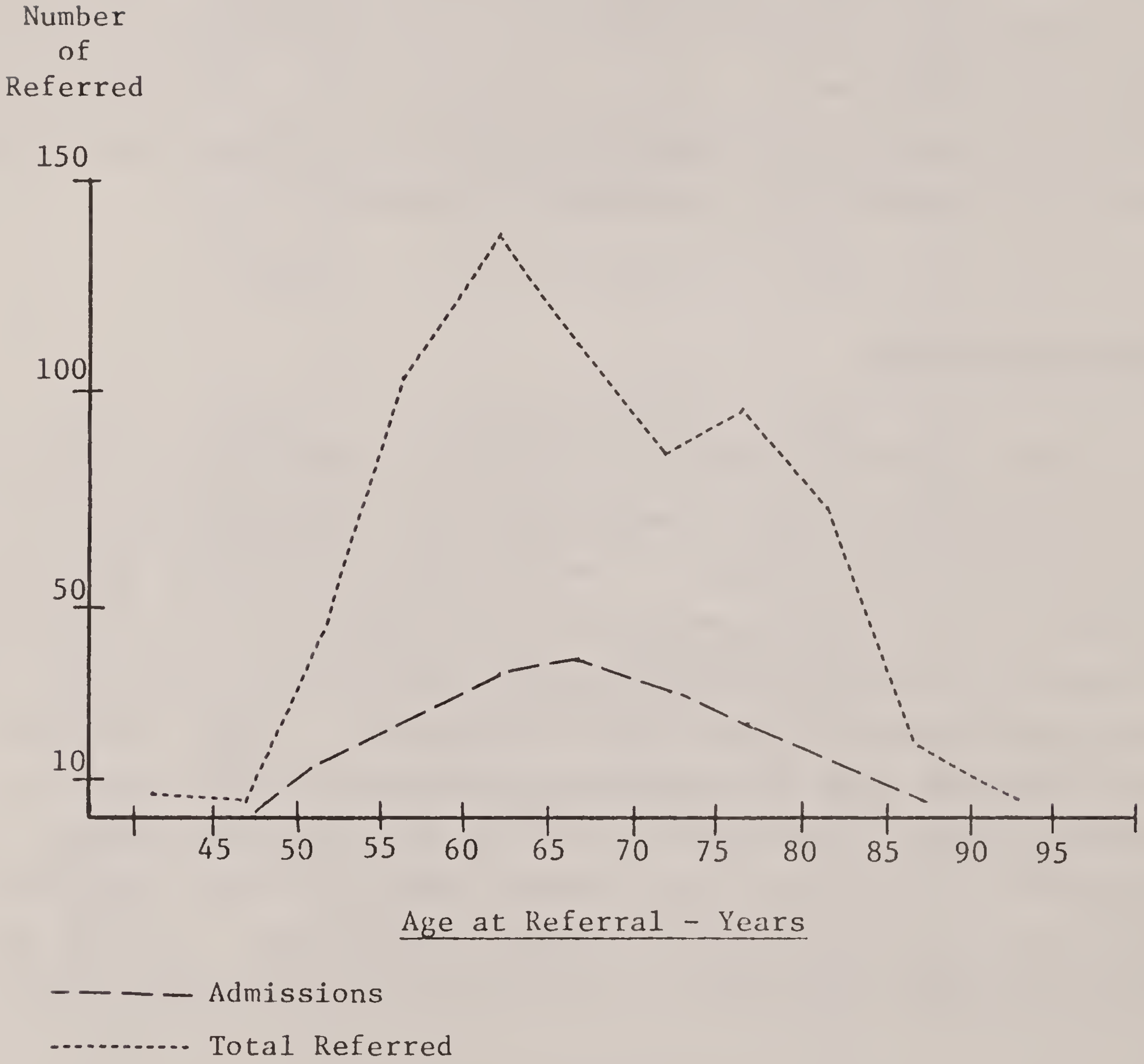
OTHER CHARACTERISTICS

The intake process calls for specific information at various stages of the process, and consequently such information is not available for the total group. The procedure followed in presenting the data is to first present the available data as a percentage of those for whom it is available, and then to indicate the number and percentage lacking the information. Since the data collection depends upon the stage of the process, that is, at points where either the candidate or CIL has made decisions, it is not possible to evaluate the various factors which influence a decision to drop out because of lack of interest. All of the following presentation should be read with this reservation in mind.

RACE AND NATIVITY

About a quarter of the candidates' records do not have data

FIGURE 4-1: DISTRIBUTION OF AGE AT REFERRAL FOR TOTAL REFERRED AND ADMISSIONS



on race and nativity (Tables 4-7 and 4-8). About 80 percent of all referrals are white. The 1970 census data for the proportion of blacks in the populations for the four states showed:

- New York State - 11.9%
- New Jersey - 10.7%
- Pennsylvania - 8.6%
- Connecticut - 6.0%

New York City, which provides 78 percent of the referrals contains about 20 percent non-white population.[4] The proportion of non-whites recently reaching CIL is, therefore, somewhat higher than could be expected. In view of the fact that there is more visual impairment among non-whites than whites, it is to be expected that non-whites should be represented disproportionately more frequently in the CIL population than in the general population. Goldstein reports the rate of legal blindness for 100,000 non-white persons, aged 65 to 74, to be three times the rate for whites of that age.[5] It is interesting to note that among those in the intake process at the cut-off date, about one-third were non-white.

One third of the referrals were foreign-born, and this proportion agrees well with census data for this age population. Further, about two thirds of the foreign-born came to the United States as children or young adults, reflecting the immigration pattern demonstrated by the total foreign-born population. The proportion among the admissions who are foreign-born is statistically significantly smaller than among the total group, indicating that this characteristic is a factor influencing admission to CIL.

EDUCATION AND OCCUPATION

Education expressed as grades of formal education completed is a factor in admission to CIL. Table 4-9 shows that among admissions, the proportion with high-school graduation or additional years of education is statistically significantly larger than among

TABLE 4-7: RACIAL DISTRIBUTION OF REFERRALS BY OUTCOMES

Race	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White	415	81.7	25	67.6	143	85.6	191	81.6	56	78.9
Black	89	17.5	12	32.4	23	13.8	41	17.5	14	19.7
Oriental	4	0.8	-	-	1	0.6	2	0.9	1	1.4
Sub-Total*	508	100.0	37	100.0	167	100.0	234	100.0	71	100.0
No Information	173	25.4	35	48.6	11	6.2	105	31.0	21	22.8
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 4-8: NATIVITY AND AGE AT ARRIVAL IN THE U.S. OF REFERRALS BY OUTCOMES

Nativity	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Per cent	Number	Percent	Number	Percent	Number	Percent
U.S. Born	334	66.3	31	64.6	124	74.7	139	62.1	40	60.6
Not U.S. Born	170	33.7	17	35.4	42	25.3	85	37.9	26	39.4
Age at Arrival:										
16 Years	66	13.1	4	8.3	17	10.2	38	16.9	7	10.6
19 - 29 Years	43	8.5	3	6.2	17	10.2	20	8.9	3	4.5
30 - 45 Years	17	3.4	3	6.2	1	0.6	8	3.6	5	7.6
46 - 59 Years	23	4.6	4	8.3	3	1.8	12	5.4	4	6.1
60 Years	5	1.0	1	2.1	2	1.2	-	-	2	3.0
Age Not Known	16	3.2	2	4.2	2	1.2	7	3.1	5	7.6
Sub-Total*	504	100.0	48	100.0	166	100.0	224	100.0	66	100.0
No Information	177	26.0	24	33.3	12	6.7	115	33.9	26	28.3
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

χ^2 1df=7.3153, $P < 0.01$(Admitted U.S. born, not U.S. born vs. all others U.S. born, not U.S. born).

*Due to rounding, percentages may not add to exactly 100.0%.

TABLE 4-9: FORMAL EDUCATION OF REFERRALS BY OUTCOMES

Formal Education	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Some Grammar School	65	20.8	13	37.1	27	16.0	19	21.8	6	27.3
Grade School Graduate	59	18.8	5	14.3	31	18.3	19	21.8	4	18.2
Some High School	59	18.8	7	20.0	27	16.0	21	24.1	4	18.2
High School Graduate	59	18.8	3	8.6	42	24.9	11	12.6	3	13.6
Some College	38	12.1	5	14.3	18	10.6	12	13.8	3	13.6
College Graduate	18	5.8	2	5.7	11	6.6	3	3.5	2	9.1
Post Graduate	15	4.8	-	-	13	7.7	2	2.3	-	-
Sub-Total*	313	100.0	35	100.0	169	100.0	87	100.0	22	100.0
No Information	368	54.1	37	51.4	9	5.1	252	74.3	50	69.4
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	72	100.0

χ^2 1df=10.8 $P < 0.005$ ($<$HS, $\geq$HS vs. Adm/Total).

*Due to rounding, percentage totals may not add to exactly 100.0%.

the total population. Since there is an obvious relationship between education and occupation, proportionately more of the admissions have, or had, occupations among the professional and higher technical skill levels.

Table 4-10 shows the distribution of occupations for the referrals. The proportion of white-collar workers is almost 59 percent for the entire group, who are neither housewives nor have ever worked, namely 146 of 249. This is a reflection of the employment pattern in the region from which the population is drawn, since the service industries are heavily represented in it. Nationally, in 1960, when the referrals were middle-aged, and in the working force, the proportion of white-collar workers was 43.8 percent.

MARITAL STATUS AND HOUSEHOLD COMPOSITION

Tables 4-11 and 4-12 present the information for these characteristics. The proportion of the widowed is large, since the population is elderly. The proportion of never-married is larger than for the normal population: 18 percent. People with chronic diseases and impairments have a high rate of never marrying, and the data suggests that about a fifth of the referred persons may have had severe vision problems long before developing the degree of impairment that qualified them for CIL (Tables 4-16, 4-17, 4-18 and 4-19.)

Many of the referrals were living alone at time of contacting CIL, and slightly more than half (51.9%) lived either with family or unrelated individuals. A small proportion were in institutional settings. Those who lived alone did not become students at any greater rate than did those living with family or others, and the pressure of coping alone does not seem to be a significant factor in the selection process.

TABLE 4-10: OCCUPATIONS OF REFERRALS BY OUTCOMES

Occupation	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Professional & Technical	50	16.3	2	5.6	35	21.3	11	12.6	2	10.0
Managerial, Officials, Proprietors	312	10.4	1	2.8	17	10.4	8	9.2	6	30.0
Clerical, Sales	64	20.8	9	25.0	36	22.0	16	18.4	3	15.0
Craftsmen, Foremen, Skilled Workers	20	6.5	2	5.6	10	6.1	7	8.0	1	5.0
Operatives, Semi-Skilled Workers	18	5.9	7	19.4	7	4.3	4	4.6	-	-
Service Workers	44	14.3	6	16.7	16	9.8	18	20.7	4	20.0
Unskilled Laborers	19	6.2	5	13.9	10	6.1	3	3.4	1	5.0
Armed Forces	2	0.7	-	-	2	1.2	-	-	-	-
Housewives	51	16.6	3	8.3	29	17.7	16	18.4	3	15.0
Never Employed	7	2.3	1	2.8	2	1.2	4	4.6	-	-
Sub-Total*	307	100.0	36	100.0	164	100.0	87	100.0	20	100.0
No Information	374	54.9	36	50.0	14	7.9	252	74.3	72	78.3
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLES 4-11, 4-12: MARITAL STATUS AND HOUSEHOLD COMPOSITION OF REFERRAL, BY OUTCOMES

Characteristics	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TABLE 4-11: MARITAL STATUS										
Married	117	35.1	10	28.6	66	37.1	34	35.4	7	29.2
Separated	27	8.1	6	17.1	12	6.7	6	6.3	3	12.5
Divorced	28	8.4	3	8.6	15	8.4	7	7.3	3	12.5
Widowed	102	30.6	12	34.3	53	29.8	31	32.3	6	25.0
Never Married	59	17.7	4	11.4	32	18.0	18	18.7	5	20.8
Sub-Total*	333	100.0	35	100.0	178	100.0	96	100.0	24	100.0
No Information	348	51.1	37	51.4	-	-	243	71.7	68	73.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0
TABLE 4-12: HOUSEHOLD COMPOSITION										
Alone	143	43.2	15	40.5	73	41.5	48	51.1	7	29.2
With Family	161	48.6	16	43.2	92	52.3	39	41.5	14	58.3
Unrelated Other	11	3.3	3	8.1	4	2.3	4	4.2	-	-
Not Applicable**	16	4.8	3	8.1	7	3.9	3	3.2	3	12.5
Sub-Total*	331	100.0	37	100.0	176	100.0	94	100.0	24	100.0
No Information	350	51.4	35	48.6	2	1.1	245	72.3	68	73.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

*Due to rounding, percentage totals may not add to exactly 100.0%.

** In institutions, other group living arrangements.

VISION STATUS AT REFERRAL, SELF PERCEPTION AS BLIND, AND OTHER ATTITUDES

The overwhelming majority of those referred to CIL had severe visual impairment, and only 19, or about three percent, did not. These were individuals who expected further impairment, and expressed interest in preparing for it by attending CIL, or investigating it. About one third of these attended CIL. Table 4-13 shows the distribution of degrees of vision impairment. Degree of impairment does not appear to be a determinant in becoming a student at CIL, in and of itself. The perception of self as blind or not blind, and successful referral, is not significantly associated. Table 4-14 shows the distribution of answers regarding this self perception.

Individuals who received a home interview were asked a series of questions relating to their feelings about the blind. The answers were scored in such a way that a high score indicated answers which implied positive attitudes; not feelings of withdrawal, helplessness and depression. Table 4-15 shows the distribution of the scores and the mean scores for each group. No significant differences were observed, and it might well be that individuals would not attempt CIL contact if they felt too depressed or hopeless about their vision.

CAUSES AND LENGTH OF BLINDNESS

The primary and secondary causes of vision impairment among the referrals show the situation to be expected; the degenerative and systemic diseases are most frequent. Table 4-16 shows the distribution of the primary causes by outcome status and the secondary causes for the entire group. There is no statistically significant difference for causes among the different outcome groups.

TABLE 4-13: VISUAL IMPAIRMENT OF REFERRALS BY OUTCOME

Vision Status	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Totally Blind	105	18.1	6	9.8	39	22.8	39	14.4	21	26.9
Light Perception Only	145	25.0	16	26.2	44	25.7	72	26.7	13	16.7
Legally Blind	311	53.6	38	62.3	82	48.0	155	57.4	36	46.2
Not Legally Blind	19	3.3	1	1.6	6	3.5	4	1.5	8	10.2
Sub-Total*	580	100.0	61	100.0	171	100.0	270	100.0	78	100.0
No Information	101	14.8	11	15.3	7	3.9	69	20.4	14	15.2
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 4-14: SELF-PERCEPTION AS BLIND OF REFERRALS BY OUTCOMES

Self-Perception As Blind	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Blind	163	51.6	16	44.4	94	57.3	41	43.6	12	54.5
Not Blind	140	44.3	16	44.4	66	40.2	48	51.1	10	45.4
Don't Know	13	4.1	4	11.1	4	2.4	5	5.3	-	-
Sub-Total*	316	100.0	36	100.0	164	100.0	94	100.0	22	100.0
No Information	365	53.6	36	50.0	14	7.9	245	72.3	70	76.1
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

χ^2 1df=3.784, Not Significant.

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 4-15: DISTRIBUTION OF ATTITUDE SCORES OF REFERRALS BY OUTCOMES

Attitude Score	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
20 - 29	4	1.5	-	-	1	1.6	2	2.5	1	4.5
30 - 39	34	12.8	2	20.0	21	13.6	7	8.7	4	18.2
40 - 49	85	31.9	6	60.0	50	32.5	23	28.8	6	27.3
50 - 59	110	41.4	1	10.0	66	42.9	34	42.5	9	40.9
60 - 69	33	12.4	1	10.0	16	10.4	14	17.5	2	9.1
Sub-Total*	266	100.0	10	100.0	154	100.0	80	100.0	22	100.0
No Information	415	60.9	62	86.1	24	13.5	259	76.4	70	76.1
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0
Mean	50.7		46.5		50.5		52.0		48.8	

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 4-16: DISTRIBUTION OF PRIMARY AND SECONDARY CAUSES OF BLINDNESS FOR REFERRALS, BY OUTCOME

Primary Causes	Total		Waiting List		Admitted		Not Interested		Not Eligible		Secondary Causes Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Glaucoma	123	20.9	11	17.7	44	25.1	54	19.6	14	18.7	50	21.6
Diabetic Retinopathy	115	19.6	12	19.4	36	20.6	51	18.5	16	21.3	10	4.3
Cataracts	83	14.1	8	12.6	16	9.1	51	18.5	8	10.7	86	37.1
Detached Retina	46	7.8	5	8.1	18	10.3	16	5.8	7	9.3	15	6.5
Retinitis Pigmentosa	36	6.1	4	6.5	9	5.1	18	6.5	5	6.7	4	1.7
Macular Retinal Degen.	34	5.9	3	4.8	10	5.7	16	5.3	5	6.7	7	3.0
Optical Nerve Ailment	26	4.4	4	6.5	3	1.7	15	5.4	4	5.3	11	4.7
Other	125	21.2	15	24.2	39	22.3	55	20.0	16	21.3	49	21.1
Sub Total*	588	100.0	62	100.0	175	100.0	276	100.0	75	100.0	232	100.0
No Information	93	13.7	10	13.9	3	1.7	63	18.6	17	18.6	449**	65.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0	681	100.0

χ^2 1df = 2.34, $P < 0.10$; not significant (Glaucoma vs. All Other Causes, Admitted vs. All Others).

* Due to rounding, percentage totals may not add to exactly 100.0%.

** These had either no secondary cause or no information.

Table 4-17 shows the age of the referrals at which the vision impairment had reached the degree which was present at the time of referral. The age at onset of current severity of impairment for those admitted and on the waiting list shows the same distribution; a normal curve with its peak at age 60-64 years, if one ignores those with onset before 45 years. Those not interested show the same normal curve, but with a peak at ages 55 to 59 years. Those ineligible contained a much larger proportion of onset before 45 years with almost 30 percent in that category, and an erratic distribution for onset at later ages.

The intervals between the onset of the current degree of impairment and the date of referral to CIL is shown in Table 4-18. Almost 60 percent of the referrals had an interval of less than five years. Although there is no statistically significant difference for the different status groups, the proportion of those reaching CIL within one year among those admitted is largest with 20 percent. The admissions, to a large degree, meet one of the aims of CIL: to assist the recently visually impaired elderly.

The relationship between age of onset and the interval until referral to CIL is shown in Table 4-19. The distribution reinforces the finding that CIL does reach its target group.

PREVIOUS EXPERIENCE WITH AGENCIES FOR THE BLIND

The various services available that are relevant to CIL are as follows: 1) Activities of daily living (ADL), 2) mobility, 3) communication which includes electronic devices, 4) Braille Script and Typing, 5) social worker services (either individual or group counselling), and 6) organized recreational activities. Table 4-20 presents such previous reported experience. A summary of this data indicates that only one-third report having received one or more such services. The incompleteness of the data

TABLE 4-17: DISTRIBUTION OF AGE AT ONSET OF BLINDNESS FOR REFERRALS, BY OUTCOMES

	Total		Waiting List		Admitted		Not Interested		Not Eligible	
Age of Onset	Number	Percent	Number	Per cent	Number	Percent	Number	Percent	Number	Percent
≤ 44	71	13.7	9	18.4	14	8.1	31	12.9	17	29.3
45 - 49	30	5.8	1	2.0	14	8.1	12	5.0	3	5.2
50 - 54	54	10.4	5	10.2	16	9.3	29	12.0	4	6.9
55 - 59	80	15.4	6	12.2	26	15.1	38	15.8	10	17.2
60 - 64	90	17.3	14	28.6	40	23.2	32	13.3	4	6.9
65 - 69	67	12.9	5	10.2	25	14.5	30	12.4	7	12.1
70 - 74	62	11.9	3	6.1	21	12.2	34	14.1	4	6.9
75 - 79	46	8.8	5	10.2	12	7.0	21	8.7	8	13.8
80 - 89	19	3.6	1	2.0	4	2.3	13	5.4	1	1.7
≥ 90	1	0.2	-	-	-	-	1	0.4	-	-
Sub Total*	520	100.0	49	100.0	172	100.0	241	100.0	58	100.0
No Information	161	23.6	23	31.9	6	3.4	98	28.9	34	37.0
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 4-18: DISTRIBUTION OF INTERVAL OF BLINDNESS FROM ONSET TO DATE OF REFERRAL FOR REFERRALS, BY OUTCOME

Interval from Onset to Date of Referral (Months)	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
≤ 11	88	16.9	9	18.4	35	20.3	37	15.4	7	12.1
12 - 23	83	16.0	13	26.5	23	13.4	36	14.9	11	19.0
24 - 59	130	25.0	9	18.4	48	27.9	60	24.9	13	92.4
≥ 60	219	42.1	18	36.7	66	38.4	108	44.8	27	46.6
Sub Total*	520	100.0	49	100.0	172	100.0	241	100.0	58	100.0
No Information	161	23.6	23	31.9	6	3.4	98	28.9	34	37.0
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

χ^2 1df = 1.712, $P > 0.10$, not significant ($<$ 60 months vs. $\geq$ 60 months for Admitted vs. All Others).

* Due to rounding, percentage totals may not add up to exactly 100.0%.

TABLE 4-19: DISTRIBUTION OF INTERVAL OF BLINDNESS FROM ONSET DATE TO DATE OF REFERRAL

	INTERVAL									
	Total		< 12 Months		12 - 23 Months		24 - 59 Months		≥ 60 Months	
Age at Onset (Years)	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
≤ 44	71	13.7	2	2.3	-	-	-	-	69	31.5
45 - 49	30	5.8	-	-	4	4.8	2	1.5	24	11.0
50 - 54	54	10.4	4	4.5	6	7.2	18	13.8	26	11.9
55 - 59	80	15.4	12	13.6	14	16.9	25	19.2	29	13.2
60 - 64	90	17.3	20	22.7	19	22.9	18	13.8	33	15.1
65 - 69	67	12.9	12	13.6	13	15.7	23	17.7	19	8.7
70 - 74	62	11.9	16	18.2	10	12.0	23	17.7	13	5.9
75 - 79	46	8.8	16	18.2	11	13.3	13	10.0	6	2.7
80 - 89	19	3.6	6	6.8	6	7.2	7	5.4	-	-
≥ 90	1	0.2	-	-	-	-	1	0.8	-	-
Sub Total*	520	100.0	88	100.0	83	100.0	130	100.0	219	100.0
No Information	161	23.6								
TOTAL*	681	100.0								

* Due to rounding, percentage totals may not add to exactly 100.0%.

makes it impossible to interpret the differences observed, and not too much weight can be given to the apparently larger proportion without previous services among those in the intake process at the cut-off date. There were 110 individuals who did report receiving services (averaging 2.25 kinds of service).

It should also be borne in mind that the individual's vision status and personal circumstances determine which services would be useful, and consequently, there is no number that could be defined as necessary, desirable or minimal. Inasmuch as CIL is designed to serve a population not previously given services, these data may be used to support the statement that CIL is reaching the designated population to a large extent.

TABLE 4-20: PREVIOUS SERVICES FROM AGENCIES FOR THE BLIND REPORTED BY REFERRALS BY OUTCOMES

	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Services:										
One or More	110	33.3	7	19.4	66	37.1	27	29.3	10	41.7
None	220	66.7	29	80.6	112	62.9	65	70.7	14	58.3
Sub Total*	330	100.0	36	100.0	178	100.0	92	100.0	24	100.0
No Information	351	51.5	36	50.0	-	-	247	72.9	68	73.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0
Mobility:										
Yes	62	19.4	3	8.3	42	25.2	16	17.4	1	4.2
No	257	80.6	33	91.7	125	74.8	76	82.6	23	95.8
Sub Total*	319	100.0	36	100.0	167	100.0	92	100.0	24	100.0
No Information	362	53.2	36	50.0	11	6.2	247	72.9	68	73.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0
ADL:										
Yes	57	17.8	5	13.9	35	20.8	14	15.2	3	12.5
No	263	82.2	31	86.1	133	79.2	78	84.8	21	87.5
Sub Total*	320	100.0	36	100.0	168	100.0	92	100.0	24	100.0
No Information	361	53.0	36	50.0	10	5.6	247	72.9	68	75.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

Continued:

TABLE 4-20: (Continued)

	Total		Waiting List		Admitted		Not Interested		Not Eligible	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Communication:										
Yes	56	17.4	5	14.3	36	21.1	12	13.2	3	12.5
No	265	82.6	30	85.7	135	78.9	79	86.8	21	87.5
Sub Total*	321	100.0	35	100.0	171	100.0	91	100.0	24	100.0
No Information	360	52.9	37	48.6	7	3.9	248	73.2	68	73.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0
Recreation:										
Yes	40	12.5	5	13.9	22	12.9	9	9.9	4	16.7
No	281	87.5	31	86.1	148	87.1	82	90.1	20	83.3
Sub Total*	321	100.0	36	100.0	170	100.0	91	100.0	24	100.0
No Information	360	52.9	36	50.0	8	4.5	248	73.2	68	73.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0
Social Services:										
Yes	33	10.3	2	5.6	16	9.4	10	11.1	5	20.8
No	287	89.7	34	94.4	154	90.6	80	88.9	19	79.2
Sub Total*	320	100.0	36	100.0	170	100.0	90	100.0	24	100.0
No Information	361	53.0	36	50.0	8	4.5	249	73.5	68	73.9
TOTAL*	681	100.0	72	100.0	178	100.0	339	100.0	92	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

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2. ____________________________, Table 44.

3. ____________________________, Table 600.

4. ____________________________, Table 23.

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CHAPTER FIVE

THE LEARNING EXPERIENCE

INTRODUCTION

The individual who, after initial contact with CIL intake staff, continues to be interested, and meets formal eligibility criteria, is asked to come to the Center for one week's evaluation. During this week, the teaching staff evaluates the level of skills in the subjects offered. A medical history and examination are done, a psychologist evaluates the candidate's learning capacity, and screens for psychological or psychiatric problems. An ophthalmological evaluation is done, and hearing evaluated if indicated.

After these evaluations are completed, the staff and candidate meet to decide if the candidate is interested in attending the Center, and if he is physically, intellectually and emotionally capable of benefitting from instruction.

When this decision is favorable, the initial teaching plan for the first month is formulated. Candidates are scheduled for starting in the program as soon as possible. When they do arrive, the scheduling of required instruction begins.

Each teacher evaluates progress, and moves from level to level, or area to area, as the student is ready. This flexibility of scheduling permits each student to move at his own pace, and also permits changes in the original plan of study, since subjects may be dropped or taken up, despite initial decisions about them. Teachers are able to stop any given subject, area, or level whenever they judge this to be desirable. All teaching decisions are made in concert with the student, or explained to him.

After a four-week teaching period, a conference with the student and the staff is scheduled where progress is reviewed, problems discussed, and plans for the following teaching period are formulated and accepted by both staff and student.

AREAS AND SKILLS WITHIN AREAS

Skills	Number of Skills
ADL:	
I. Table Behaviour	
II. Cleaning skills	
III. Food preparation	
IV. Stove and safety techniques	
V. Electrical appliances	
VI. Sewing	6
Braille Aids:	
I. Tactile aids; techniques of handling cash	1
Braille Reading and Writing:	
I. Alphabet and number cells	
II. Braille capital letters and punctuation	
III. Advanced contracted Braille(3 each)	6
Electronic Devices:	
I. Telephone	
II. Audio receiver	
III. Talking book records machine	
IV. Cassette tape recorder	
V. Reel-to-reel tape recorder	5
Grooming:	
I. Bathroom activities and personal care	
II. Organization of clothing	2
(Sub Total:	20)

Table continues on next page.

Areas and Skills Within Areas: Table Cont.

Skills	Number of Skills
(Sub Total from 5-2:	20)
Orientation and Mobility:	
I. Protective Skills	
II. Travel in Indoor Environment	
III. Basic travel outdoors	
IV. Advanced travel outdoors	
V. Large Business Areas and Public Transportation:	
a. Bus travel	
b. Subway travel	
c. Negotiate crowds	
d. Use large store	8
Script:	
I. Produce acceptable signature with or without aids, guides, etc.	
II. Write a bankable check with or without aids, guides, etc.	
III. Write a legible letter with or without aids, guides, etc.	
IV. Write a mailable envelope with or without aids, guides, etc. . .	4
Typing:	
I. Identification/use of basic parts	
II. Touch typing of lower three rows, two function keys	
III. Touch typing of rest of keys, including all function keys	
IV. Informal correspondence	4
TOTAL:	36

In addition to the formal teaching periods, there are other activities which are scheduled for the students. These range from non-teaching sessions with individual instructors to: 1) appointments with the social workers, physician or clinic, 2) sessions with psychologist or group, 3) student meetings, 4) visits at the ophthalmology or low vision clinic, 5) visits at the hearing clinic or hearing-aid service, and 6) home visits. Shopping trips and appointments at the barbershop or beauty parlor are scheduled, as needed, as part of ADL or Grooming teaching sessions, so that the student learns to deal with these independently.

The student graduates after he has completed the skills he has been scheduled to learn, or else has reached a plateau. Some students leave before graduating, either because they wish to leave before completing the course decided for them, or because they have used up the time they have available for the program. In any case, there will be a record of their incoming status, the hours of instruction and other staff time they accumulated, their learning achievements and failures, if any. The exceptions are those students who attended CIL in the very beginning months when relevant records and forms had not yet been developed, tested and adopted.

The abacus course proved to be unsuccessful, and teaching it was abandoned quickly. The seven students who attempted it did not learn any arithmetic processes, and their skill levels are not included in the following material. Sensory Development can not be reported in terms of initial need or ability, nor in terms of achievement at leaving CIL, since formal evaluation instruments were not developed at the time this evaluation study was begun. In both cases, however, the teaching hours will be included in the report.

INCOMING ABILITIES AND SKILLS

The overall assessment results of the initial evaluation period are shown in Table 5-1. The distribution of numbers of skills that

TABLE 5-1

DISTRIBUTION OF STUDENTS BY ASSESSMENT OUTCOME: SKILLS TO BE LEARNT, OF NO INTEREST, IRRELEVANT OR INAPPROPRIATE AND ABLE TO DO

Skills To Be Learnt**

Number	Students Number	Students Percent
5 - 9	9	6.5
10 - 14	12	8.7
15 - 19	29	21.0
20 - 24	39	28.3
25 - 29	37	26.8
30 - 34	11	8.0
No information	1	0.7
TOTAL*	138	100.0
Mean	21.0	
Median	22.0	
Range	5 - 33	

Skills of No Interest**

Number	Students Number	Students Percent
1 - 2	16	11.6
3 - 4	25	18.1
5 - 6	20	14.5
7 - 8	21	15.2
9 - 10	13	9.4
11 - 12	8	5.8
13 - 14	16	11.6
15 - 19	15	10.9
≥ 20	3	2.2
No information	1	0.7
TOTAL*	138	100.0
Mean	7.4	
Median	7.0	
Range	1 - 22	

Skill Irrelevant Or Inappropriate**

Number	Students Number	Students Percent
None	69	50.0
1 - 2	29	21.0
3 - 4	20	14.5
5 - 6	8	5.8
7 - 8	5	3.6
≥ 9	6	4.3
No information	1	0.7
TOTAL*	138	100.0
Mean	1.8	
Median	1.0	
Range	0 - 14	

Skills Able To Do**

Number	Students Number	Students Percent
None	7	5.1
1 - 2	22	15.9
3 - 4	43	31.2
5 - 6	29	21.0
7 - 8	19	13.8
9 - 10	11	8.0
≥ 11	6	4.3
No information	1	0.7
TOTAL*	138	100.0
Mean	5.2	
Median	4.0	
Range	0 - 15	

*Due to rounding, percentage totals may not add to exactly 100.0%.

**Total number of skills = 36.

are to be taught shows a very large range, from five to 33 skills, and over half the students (55 percent) were judged to require between 20 and 29. It will be remembered that students and staff limit the selection of skills because either the student is competent, or expresses a lack of interest, or else specific skills are irrelevant or inappropriate. The numbers of skills to be taught is consequently the residual after subtracting the latter three groups of skills from the 36 available. CIL policy states that candidates require training in at least three subjects in order to be admitted.

Candidates varied greatly in the number of skills they did not wish to tackle. Some choices could cover sets of skills as, for instance, the three levels each for Braille Reading and Writing, or the four levels for Typing. Sewing was of no interest to women who had not sewn before their vision deteriorated. Probably individual patterns of daily living are a major determinant in these choices. Candidates who do not write letters may not have any reason to learn Typing or Script beyond the signature level. It is difficult to establish any pattern for these choices, but it can be said that, with only a few exceptions, at least half the skills were of interest.

A further factor for eliminating skills was the irrelevance or inappropriateness to the student. For example, individuals not living in New York City had no need to learn coping with subways. Vision status could obviate some areas of O&M, and physical problems would rule out other skills which required manual dexterity or sensitivity. In the latter situation, the staff would rule out skills. The program, as offered, is well within the capabilities of most students, with almost three-quarters either finding no, or only one or two, skills eliminated for them.

Finally, students were judged able to perform some skills adequately and did not require these specific trainings. Vision status and previous training account for these competences.

Previous training, however, usually achieved competence only in the lower levels of subjects, and some areas of others, and it was very rare that a candidate demonstrated competence in an entire field. The candidates selected for admission did demonstrate the need for CIL's program.

ADL

The different areas in this field show quite varying degrees of skill. Table 5-2 presents the data. Area I, Table Behaviour, is no problem for about 40 percent, but the remaining 60 percent require some teaching (50%), or complete instruction (10%). It is one of the very few areas which is of interest and relevance to the entire student population. Areas II and III, Cleaning Skills and Food Preparation, can be done well by about 12 and 22 percent respectively. Correspondingly large proportions require either partial or total instruction to master these areas. Stove and Safety techniques can be done properly by only 10 percent, over one-third (37.7%) cannot handle this activity at all, and 45 percent require additional training. In contrast, three-quarters can handle Electrical Appliances (Area V) safely, and those who require training know something about these techniques already. Interest is very high for these five areas. In contrast, Sewing is of marginal value to the students (the men essentially disqualify), and only 16 percent of the women desire and require assistance in this activity, while 77 percent of the 75 women had no interest in it.

BRAILLE

About 40 percent of the students either have no interest in, or are not suited for, learning to Braille Read and Write, and this lack of interest increases for the advanced levels (Table 5-3). Very few, less than five percent, know Levels I and II Braille well

TABLE 5-2: DISTRIBUTION OF STUDENTS BY INTAKE ASSESSMENT FOR ADL

	A D L L E V E L S*											
	I		II		III		IV		V		VI	
Intake Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Interested	-	-	5	3.6	3	2.2	2	1.4	4	2.9	58	42.0
Inappropriate	-	-	2	1.4	1	0.7	2	1.4	3	2.2	62	44.9
Can Do	54	39.1	16	11.6	31	22.5	14	10.0	105	76.1	-	-
Review/Practice	-	-	1	0.7	1	0.7	5	3.6	-	-	-	-
Know Partially	69	50.0	87	63.0	91	65.9	62	44.9	25	18.1	12	8.7
Know None	14	10.0	26	18.8	10	7.2	52	37.7	-	-	-	-
Not Tested, No Information	1	0.7	1	0.7	1	0.7	1	0.7	1	0.7	6	4.3
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0

* See Pages 5-2, 5-3 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 5-3: DISTRIBUTION OF STUDENTS BY INTAKE ASSESSMENT FOR BRAILLE READING, WRITING AND AIDS

	READING LEVEL*						WRITING LEVEL*						BRAILLE AIDS*	
	I		II		III		I		II		III			
Intake Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Interested	49	35.5	55	39.9	61	44.2	52	37.7	57	41.3	63	45.6	3	2.2
Inappropriate	5	3.6	5	3.6	5	3.6	5	3.6	5	3.6	5	3.6	5	3.6
Can Do	2	1.4	2	1.4	1	0.7	2	1.4	2	1.4	1	0.7	3	2.2
Review/Practice	4	2.9	4	2.9	2	1.4	3	2.2	3	2.2	1	0.7	5	3.6
Know Partially	5	3.6	-	-	-	-	-	-	-	-	-	-	35	25.4
Know None	72	52.2	43	31.1	17	12.3	72	52.2	40	29.0	16	11.6	86	62.3
Can't Do Lower Level	-	-	28	20.3	51	37.0	3	2.2	30	21.7	51	37.0	-	-
Not Tested, No Information	1	0.7	1	0.7	1	0.7	1	0.7	1	0.7	1	0.7	1	0.7
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-2 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

enough not to require basic teaching. Even fewer know or need brush-up (review and practice) assistance for Levels III. Thus, with a few exceptions, none of those interested know any Braille at all, and these, representing about half the students, want instruction, and apparently intend to learn all three levels.

Braille Aids are also not familiar to the students (62 percent cannot handle them at all) but a quarter have some familiarity with some of them. Only about six percent are either not interested or found them inappropriate or not relevant.

ELECTRONIC DEVICES

It is interesting to see, from Table 5-4, that more students can handle the Talking Book Record Machine (TBM) than the telephone (Areas I and III respectively). Only about 40 percent can handle the telephone or need brushing up, while about 57 percent are in this situation in respect to the TBM. Very few express no interest in learning to handle the telephone, or find it inappropriate or not relevant, and only a slightly larger proportion is in this position as far as TBM is concerned. The Audio Receiver is of very little interest to the students, Area II, and is only surpassed by lack of interest by Reel to Reel Tape Recorders, Area V. About 66 and 91 percent, respectively, said they had no interest in learning to operate these machines. The Cassette Tape Recorder, Area IV, is not a familiar aid to most students; only about 12 percent can manage it well or need brushing up. Almost two-thirds, however, wish to learn its operation.

GROOMING

In both areas students either were competent, needed brushing up or were able to handle the activities at least partially (Table 5-5). Only one individual could not do any of the tasks related to personal hygiene, and three knew nothing about handling their clothes.

TABLE 5-4: DISTRIBUTION OF STUDENTS BY INTAKE ASSESSMENT FOR ELECTRONIC DEVICES

	ELECTRONIC DEVICES AREAS*									
	I		II		III		IV		V	
Intake Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Interested	3	2.2	91	65.9	10	7.2	24	17.4	125	90.6
Inappropriate	2	1.4	4	2.9	4	2.9	3	2.2	3	2.2
Can Do	44	31.9	5	3.6	67	48.6	13	9.4	2	1.4
Review/Practice	11	8.0	-	-	12	8.7	3	2.2	-	-
Know Partially	-	-	-	-	-	-	4	2.9	1	0.7
Know None	74	53.6	36	26.1	42	30.4	89	64.5	5	3.6
Not Tested, No Information	4	2.9	2	1.4	3	2.2	2	1.4	2	1.4
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0

TABLE 5-5: DISTRIBUTION OF STUDENTS BY INTAKE ASSESSMENT FOR GROOMING AREAS

	GROOMING AREAS*			
	I		II	
Intake Status	Number	Percent	Number	Percent
Not Interested	-	-	3	2.2
Inappropriate	1	0.7	2	1.4
Can Do	53	38.4	39	28.3
Review/Practice	8	5.8	11	8.0
Know Partially	70	50.7	74	53.6
Know None	1	0.7	3	2.2
Not Tested, No Information	5	3.6	6	4.3
TOTAL**	138	100.0	138	100.0

* See Page 5-2 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

O & M

Table 5-6 reveals a very great need for this field for CIL students. The staff finds great lack of knowledge about Protective Skills (Area I), and the stages of Indoor and Outdoor Travel (Areas II, III and IV). Interest is essentially universal, and only small proportions either do not need training in these areas or cannot handle it. Students perform best in Area II, Indoor Travel, with 51 percent partially trained or able, and only 31 percent requiring complete instruction. For Areas I, III and IV the corresponding proportions are 18 and 57, 25 and 57, and 15 and 65 percent.

Students are much less interested in learning to manage public transportation, crowds and large stores (Areas V, a,b,c,d). The 34 who wish to learn coping with subways represent about one-quarter of all students, but constitute 30 percent of New York City residents. Half the students wish to learn travelling on buses, and slightly more are interested in learning how to negotiate in crowds. Learning to shop in large stores is either not relevant or of no interest to 44 percent of all students. An equal proportion, however, are interested in acquiring this skill. The amount of instruction desired in this area is substantial, and almost four-fifths are involved in this field on one level or another.

SCRIPT

The instruction in this field centers on maintaining or restoring the students' ability to write well enough so that signatures, checks and envelopes are functionally adequate, and that letters can be understood. All except one student were literate, and 62 percent required training in the utilization of the variety of devices that assist in producing legibility (Table 5-7). About 30 percent could produce a useable signature, about three percent could not, and three students expressed no interest in this area.

TABLE 5-6: DISTRIBUTION OF STUDENTS BY INTAKE ASSESSMENT FOR O&M

	O & M LEVELS*							
	I		II		III		IV	
Intake Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Interested	-	-	-	-	1	0.7	3	2.2
Inappropriate	20	14.5	9	6.5	7	5.1	11	8.0
Can Do	11	8.0	10	7.2	6	4.3	2	1.4
Review/Practice	2	1.4	3	2.2	6	4.3	5	3.6
Know Partially	25	18.1	71	51.4	34	24.6	21	15.2
None	78	56.5	43	31.2	78	56.5	90	65.2
Can't Do Lower Level	-	-	-	-	4	2.9	4	2.9
Not Tested, No Information	2	1.4	2	1.4	2	1.4	2	1.4
TOTAL*	138	100.0	138	100.0	138	100.0	138	100.0

	V-a		V-b		V-c		V-d	
Intake Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Interested	29	21.0	51	37.0	23	16.7	33	23.9
Inappropriate	23	16.7	40	29.0	25	18.1	28	20.3
Can Do	4	2.9	1	0.7	5	3.6	3	2.2
Review/Practice	3	2.2	2	1.4	3	2.2	3	2.2
Know Partially	-	-	-	-	1	0.7	-	-
None	69	50.0	34	24.6	72	52.2	61	44.2
Can't Do Lower Level	5	3.6	5	3.6	6	4.3	6	4.3
Not Tested, No Information	5	3.6	5	3.6	3	2.2	4	2.9
TOTAL*	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-3 for details.

** Due to rounding, percentage totals may not add exactly to 100.0%.

TABLE 5-7: DISTRIBUTION OF STUDENTS BY INTAKE ASSESSMENT FOR SCRIPT

	SCRIPT LEVELS*							
	I		II		III		IV	
Intake Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Interested	3	2.2	19	13.8	12	8.7	12	8.7
Inappropriate	-	-	7	5.1	3	2.2	3	2.2
Can Do	43	31.2	44	31.9	25	18.1	31	22.5
Review/Practice	-	-	-	-	-	-	-	-
Require Aids	86	62.3	50	36.2	89	64.5	75	54.3
None	4	2.9	2	1.4	5	3.6	9	6.5
Not Tested, No Information	2	1.4	16	11.6	4	2.9	8	5.8
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-3 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

Only half as many students were interested in learning to produce acceptable checks as wanted to learn legible signatures, and 19 percent either had no interest, need nor ability to learn writing adequate checks (Area II).

Writing letters(Area III) adequately was a skill present among fewer than the other three, only 18 percent could do so. About two-thirds were interested in obtaining instruction, while about 11 percent either found this irrelevant or of no interest. Addressing envelopes that were mailable was a problem to about as large a proportion of the students as writing letters; slightly more could do this adequately, and about 60 percent who could not do this task wished to receive instruction.

Wishing to learn how to write adequate letters and envelopes compares quite closely to wishing to master the Cassette Tape Machine (Table 5-4). Students appear to recognize the need to maintain communication and are willing to learn more than one method.

TYPING

Table 5-8 demonstrates that typing is considered about as desirable as Braille (Table 5-3), since about the same proportion, 40 percent or so, announced no interest in learning it. Slightly more students were able to type adequately than could read or write Braille, and as a consequence, fewer were available to require instruction. The significant difference lies in the larger proportions who knew some aspects of typing by touch at basic levels I and II; these were 41 and 18 percent respectively. Those wishing to learn Braille were essentially novices.

SUMMARY OF INITIAL ASSESSMENTS

The students admitted to CIL demonstrated lack of skills in the basic aspects of daily living. They required instruction to enable

TABLE 5-8: DISTRIBUTION OF STUDENTS BY INTAKE ASSESSMENT FOR TYPING

	TYPING LEVELS*							
	I		II		III		IV	
Intake Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Interested	50	36.2	50	36.2	50	36.2	50	36.2
Inappropriate	3	2.2	3	2.2	3	2.2	3	2.2
Can Do	16	11.6	9	6.5	4	2.9	6	4.3
Review/Practice	-	-	-	-	2	1.4	2	1.4
Know Partially	57	41.3	25	18.1	13	9.4	2	1.4
Know None	8	5.8	46	33.3	59	42.8	60	42.5
Can't Do Lower Level	-	-	1	0.7	3	2.2	11	8.0
Not Tested, No Information	4	2.9	4	2.9	4	2.9	4	2.9
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-3 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

them to move about, not only independently, but safely. Equally, they lacked the skills to look after themselves adequately and safely. Their ability to maintain contact with the world around them also proved to be inadequate.

Table 4-20, reporting previous utilization of services and training for the visually impaired, showed very low utilization. The results of the intake evaluations provide evidence that the screening and selection process functions well, since the candidates admitted to the Center have serious deficiencies in those skills the Center teaches. Further evidence is the finding that 28 persons reached the evaluation stage who were not admitted. Of these, 18 decided that they were not interested in attending CIL, though eligible, six were found to be ineligible as a result of the evaluation, and four died before they could take advantage of an opening at the Center.

INSTRUCTION AND ACHIEVEMENT

As discussed previously, the student and staff meet regularly, about every month, to discuss the student's progress and immediate further plan for study. When the decision is reached that the student is ready to leave, the assessment of work accomplished or left undone is available from these regular periodic records. The reasons for the decision to terminate the training at the particular moment is not systematically available, and it was not possible to analyze this aspect reliably. The status in terms of achievements and meeting objectives, however, could be established, and this section presents the findings.

The data, basically, should be compared to that presented in Tables 5-2 to 5-8, but it must be borne in mind that students and staff can and do change the initial plan of study, skills are dropped or taken after all, areas are not taken because of lack of time, etc. Categories of reporting outcomes which are employed in the presentation are shown in Figure 5-1, below. The distribution of outcomes is based on the "total to be taught." In addition, the Tables show the percentages of the three summary groups: "Total To Be Taught," "Not Needed, Wanted" and "No Information," based on the total 138 admitted students.

ADL

The proportion successfully completing the five areas range from 86 percent for Area I to 72 percent for Area V (Table 5-9). Area IV consists of a relatively large number of skills which involve physical safety, and three students decided to stop instruction and practice, despite the fact that instructors felt that they were not yet able to perform without physical risk to themselves. The proportions who achieved the various stages short of mastery are similar for the different areas. The data for sewing instruction follows the same distributions; the numbers are small, and apparent differences, such as only 62 percent for "Learnt All," are not significant.

BRAILLE

Table 5-10 shows the difficulties the students experienced with Braille Reading and Writing, as well as with Braille Aids. Proportionately fewer completed the beginning levels satisfactorily, and consequently fewer could attempt more advanced levels. Undoubtedly age and physical factors make this a relatively difficult area. Less than a quarter completed the advanced levels satisfactorily, and three students never could start Braille Writing, since they did not manage enough of the elementary Reading to make the attempt.

ELECTRONIC DEVICES

Over 90 percent learnt to use the telephone correctly either

FIGURE 5-1: CODING CATEGORIES AND THEIR DESCRIPTIONS EMPLOYED FOR ASSESSING "OUTCOMES"

Learnt All	.	Student mastered all items included in a "skill."
Review/Practice	.	Student reviewed items or practised them; can now perform satisfactorily.
Learnt Part	.	Student learnt half or more of the items included in a "skill."
Learnt None	.	Student learnt less than half of items in "skills."
Gave Up	.	Student made decision to drop the area or level.
Level Not Reached	.	Advanced level not started because previous level not completed.
Still at Risk	.	Student decided skill mastered, but staff feels student not safe when performing activity.
Staff Stopped	.	Skill, area or level dropped because instructor felt student could not master it regardless of intention or diligence.
No Instruction	.	Skill, area or level was to have been taught, but for a variety of reasons never actually was scheduled for teaching.
Total to be Taught	.	All students whose records show that the decision had been made to learn the area, level or skill.
Not Needed, Wanted	.	Total of students who had no interest in it, or for whom the subject was irrelevant or inappropriate.
No Information	.	All cases for whom outcome of teaching was not ascertainable.
Total	.	The 138 students admitted to CIL who had left by October 15, 1976.

TABLE 5-9: DISTRIBUTION OF STUDENTS BY FINAL ASSESSMENT FOR ADL

	ADL LEVELS*											
	I		II		III		IV		V		VI	
Status on Leaving	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Learnt All	71	85.5	92	80.7	78	76.5	89	74.8	18	72.0	8	61.5
Review/Practice	-	-	1	0.9	1	1.0	5	4.2	-	-	-	-
Learnt Part	7	8.4	10	8.8	10	9.8	12	10.1	1	4.0	2	15.4
Learnt None	4	4.8	5	4.4	6	5.9	5	4.2	1	4.0	1	7.7
Gave Up	1	1.2	1	0.9	1	1.0	-	-	-	-	-	-
Still at Risk	-	-	-	-	-	-	3	2.5	-	-	-	-
Staff Stopped	-	-	2	1.7	1	1.0	1	0.8	1	4.0	1	7.7
No Instruction	-	-	3	2.6	5	4.9	4	3.4	4	16.0	1	7.7
Total To Be Taught**	83	100.0	114	100.0	102	100.0	119	100.0	25	100.0	13	100.0
Percent of Total		60.2		82.6		73.9		86.2		18.1		9.4
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-2 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 5-10: DISTRIBUTION OF STUDENTS BY FINAL ASSESSMENT FOR BRAILLE READING, WRITING & AIDS

	READING LEVEL*						WRITING LEVEL*						AIDS*	
	I		II		III		I		II		III		I	
Status on Leaving	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Learnt All	51	63.0	35	46.7	17	24.3	49	62.8	34	46.6	16	23.5	77	61.1
Review/Practice	4	4.9	4	5.3	2	2.9	3	3.8	3	4.1	1	1.5	5	4.0
Learnt Part	15	18.5	8	10.7	-	-	5	6.4	6	8.2	-	-	37	29.4
Learnt None	5	6.2	-	-	-	-	8	10.3	-	-	-	-	5	4.0
Gave Up	5	6.2	-	-	-	-	3	3.8	-	-	-	-	1	0.8
Level Not Reached	-	-	28	37.3	51	72.9	3	3.8	30	6.1	51	75.0	-	-
No Instruction	1	1.2	-	-	-	-	7	9.0	-	-	-	-	1	0.8
Total To Be Taught**	81	100.0	75	100.0	70	100.0	78	100.0	73	100.0	68	100.0	126	100.0
Percent of Total		58.7		54.3		50.7		56.5		52.9		49.3		91.3
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-2 for details.
** Due to rounding, percentage totals may not add to exactly 100.0%.

by completing instruction or brushing up (Table 5-11). Similar success rates were achieved for the other four areas.

GROOMING

About 80 percent completed or brushed-up each of the two areas. The distribution by the reasons for not achieveing mastery is quite similar to that for other areas. Table 5-12 presents the findings.

O & M

Table 5-13 shows the experience in this field. The number who intended to take instruction for the first four levels is essentially identical (see "Total To Be Taught"), but the success rates decrease steadily by progressive difficulty of level, and significant proportions of students only managed to learn portions of the levels. Only 48 percent, those who "Learnt All" and "Had Brushed-Up," could handle Outdoor Travel (Level IV) when leaving CIL.

The areas covering public transportation, crowded areas and large stores (Areas V, a through d), showed relatively low success rates also. Some students never advanced enough to start these areas, or else were never scheduled to begin instruction. It is not clear from the records whether in the case of O&M a distinction was made between "Level Not Reached" and "No Instruction." It is quite possible that most of the "No Instruction" cases actually should be "Level Not Reached."

SCRIPT

Almost everyone succeeded in achieving an acceptable signature (Table 5-14), with only one person giving up, and three never starting the subject. All those who attempted check writing (Area II),

TABLE 5-11: DISTRIBUTION OF STUDENTS BY FINAL ASSESSMENT FOR ELECTRONIC DEVICES

	ELECTRONIC DEVICES AREAS*									
	I		II		III		IV		V	
Status on Leaving	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Learnt All	68	80.0	35	97.2	39	72.2	86	89.6	4	66.7
Review/Practice	10	11.8	-	-	11	20.4	3	3.1	-	-
Learnt Part	-	-	-	-	1	1.8	1	1.0	1	16.7
Learnt None	2	2.4	-	-	-	-	1	1.0	-	-
Gave Up	2	2.4	-	-	1	1.5	2	2.1	-	-
Staff Stopped	-	-	-	-	-	-	1	1.0	-	-
No Instruction	3	3.5	1	2.8	2	3.7	2	2.1	-	-
Total To Be Taught**	85	100.0	36	100.0	54	100.0	96	100.0	6	100.0
Percent Of Total		61.6		26.1		39.1		69.9		4.3
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-2 for details.
** Due to rounding, percentage may not add to exactly 100.0%.

TABLE 5-12: DISTRIBUTION OF STUDENTS BY FINAL ASSESSMENT FOR GROOMING

	GROOMING AREAS*			
	I		II	
Status On Leaving	Number	Percent	Number	Percent
Learnt All	54	68.4	61	69.3
Review/Practice	8	10.1	9	10.2
Learnt Part	8	10.1	8	9.1
Learnt None	2	2.5	-	-
Gave Up	1	1.3	2	2.3
Staff Stopped	1	1.3	1	1.1
No Instruction	5	6.3	7	8.0
Total To Be Taught**	79	100.0	88	100.0
Percent Of Total		57.2		63.8
TOTAL**	138	100.0	138	100.0

* See Page 5-2 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 5-13: DISTRIBUTION OF STUDENTS BY FINAL ASSESSMENT FOR O&M

	O & M LEVELS*							
	I		II		III		IV	
Status on Leaving	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Learnt All	79	74.5	84	70.6	75	61.0	54	44.6
Review/Practice	2	1.9	3	2.5	5	4.1	4	3.3
Learnt Part	17	16.0	23	19.3	25	20.3	38	31.4
Learnt None	2	1.9	5	4.2	5	4.1	3	2.5
Gave Up	2	1.9	1	0.8	1	0.8	2	1.7
Level Not Reached	-	-	-	-	4	3.2	4	3.3
At Risk	-	-	-	-	1	0.8	3	2.5
Staff Stopped	-	-	-	-	-	-	-	-
No Instruction	4	3.8	3	2.5	7	5.7	13	10.7
Total To Be Taught**	106	100.0	119	100.0	123	100.0	112	100.0
Percent Of Total		76.8		86.2		89.1		87.7
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-3 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

Continued

TABLE 5-13: Continued

	O & M LEVELS*							
	V-a		V-b		V-c		V-d	
Status on Leaving	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Learnt All	42	53.2	19	46.3	51	62.2	34	48.6
Review/Practice	2	2.5	2	4.9	2	2.4	2	2.9
Learnt Part	-	-	-	-	1	1.2	-	-
Learnt None	7	8.9	3	7.3	2	2.4	2	2.9
Gave Up	2	2.5	1	2.4	1	1.2	1	1.4
Level Not Reached	5	6.3	5	12.2	6	7.3	6	8.6
At Risk	1	1.3	-	-	-	-	-	-
Staff Stopped	-	-	-	-	-	-	1	1.4
No Instruction	20	25.3	11	26.8	19	23.2	24	34.3
Total To Be Taught**	79	100.0	41	100.0	82	100.0	70	100.0
Percent Of Total		57.2		29.7		59.4		50.7
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-3 for details

** Due to rounding, percentage totals may not add exactly to 100.0%.

TABLE 5-14: DISTRIBUTION OF STUDENTS BY FINAL ASSESSMENT FOR SCRIPT

	SCRIPT LEVELS*							
	I		II		III		IV	
Status on Leaving	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Learnt All	73	81.1	38	74.5	69	73.4	66	78.6
Review/Practice	13	14.4	5	9.8	15	16.0	9	10.7
Learnt Part	-	-	-	-	5	5.3	3	3.6
Learnt None	-	-	-	-	-	-	-	-
Gave Up	1	1.1	-	-	1	1.1	1	1.2
No Instruction	3	3.3	8	15.7	4	4.2	5	6.0
Total To Be Taught**	90	100.0	51	100.0	94	100.0	84	100.0
Percent Of Total		65.2		37.0		68.1		60.9
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-3 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

and who had instruction, accomplished their objective. Partial success occurred only for Writing Letters and Envelopes (Areas III and IV), where about 10 percent either did not master the skills adequately or gave up.

TYPING

Table 5-15 shows a decreasing rate of success according to progressive levels. Students did well for Levels I and II, which includes only the alphabet and limited punctuation. This is interesting, since it seems to agree with the impression that many people never learn beyond this stage if they are not working as a typist. The students not able to use vision do not do well in the advanced areas.

SUMMARY

The achievement rates are quite high, and lead to the conclusion that staff and students are successful in planning the individually tailored plans. The proportion of students who give up, learn nothing, or are stopped by staff, is quite small, and since these are the "failures" in planning the course of study, staff assessment of the student's needs and ability seem sound. The only area which indicates undue optimism is that of expectation to attempt and complete advanced levels. The students probably have no realistic concept of the time requirements and difficulties of Braille, and outdoor Travel in particular.

TABLE 5-15: DISTRIBUTION OF STUDENTS BY FINAL ASSESSMENT FOR TYPING

	TYPING LEVELS*							
	I		II		III		IV	
Status on Leaving	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Learnt All	47	72.3	59	81.9	36	46.7	43	57.3
Review/Practice	-	-	-	-	2	2.6	2	2.7
Learnt Part	12	18.5	6	8.3	24	31.2	4	5.3
Learnt None	1	1.5	1	1.4	6	7.8	6	8.0
Gave Up	3	4.6	3	4.2	2	2.6	2	2.7
Level Not Reached	-	-	1	1.4	3	3.9	11	14.7
Staff Stopped	1	1.5	1	1.4	2	2.6	1	1.3
No Instruction	1	1.5	1	1.4	2	2.6	6	8.0
Total To Be Taught**	65	100.0	72	100.0	77	100.0	75	100.0
Percent Of Total		47.1		52.1		55.8		54.3
TOTAL**	138	100.0	138	100.0	138	100.0	138	100.0

* See Page 5-3 for details.

** Due to rounding, percentage totals may not add to exactly 100.0%.

CHAPTER SIX

THE EFFORT

The previous sections dealt with the curriculum in terms of subjects, and not with individuals. The data to be presented now will examine the effort made by both students and CIL to obtain these achievements.

WEEKS IN PROGRAM

The time span during which a student was registered at CIL was available, and it was possible to identify those weeks during which instruction took place, weeks which were interruptions when the student did not attend at all, and weeks during which the student received other services but not instruction.

Table 6-1 shows the distribution of number of weeks students attended CIL. Omitted are weeks of interruption, and the period at the end of attendance where the student is not yet formally moved off the "active" list, since paper work is still going on. The weeks counted include weeks in which the student received services through personal contact with a staff member.

The program envisages an attendance period of around three to four months, or 12 to 16 weeks. It is immediately clear that the range of weeks attended is very large indeed, from 1 to 37 weeks, which latter time span amounts to nine months. The mean length of attendance is 14.2 weeks, and the median is 14 weeks, which is slightly longer than the period expected by CIL.

The students' records also showed interruptions, and Table 6-2 shows the distribution of students by number and total number of

TABLE 6-1: DISTRIBUTION OF STUDENTS BY THE NUMBER OF WEEKS THEY ATTENDED CIL

	Total	
Weeks	Number	Percent
1 - 4	9	6.5
5 - 9	19	13.8
10 - 14	44	31.9
15 - 19	33	23.9
20 - 24	11	8.0
25 - 29	4	2.9
30 - 34	4	2.9
35 - 39	1	0.7
No Information	13	9.4
Total*	138	100.0

Mean	13.8
Median	14
Range	1 - 37

TABLE 6-2: DISTRIBUTION OF STUDENTS BY THE NUMBER OF INTERRUPTIONS AND NUMBER OF WEEKS OF INTERRUPTIONS WHILE ATTENDING CIL

	Total[a]		One	2-4	5-8	≥ 9[b]
Number of Interruptions	Number	Percent	Number	Number	Number	Number
None	53	38.7	-	-	-	-
One	44	32.1	23	10	7	4
Two	24	17.5	-	18	3	3
Three	12	8.8	6	6	4	2
Four	1	0.7	-	-	1	-
Five	3	2.2	-	-	2	1
TOTAL*	137	100.0	23	34	17	10

[a] One case without information omitted.

[b] The range was from 0-23 weeks.

* Due to rounding, percentage totals may not add to exactly 100.0%.

weeks of interruptions. Almost 40 percent attended continuously, and an additional third interrupted once. Two of these were absent for 21 and 23 weeks, respectively. The reasons could not be established reliably, but illness, personal business, and the desire for a rest-period - a "vacation" - from CIL, are all documented. Inclement weather and difficulty of travel accounted for some of the interruptions also.

PERIODS OF EFFORT

The students did not necessarily attend full-time. Some of the commuters, especially, came in only for several days during the week. Some residents preferred not to travel on Mondays or Fridays, and spent less than a five-day "work week" at CIL. To assess the amount of actual teaching and other staff time, it became necessary to resort to examining periods as the units presented are only those periods which were scheduled to give the student instruction or other professional services with at least one professional present. Casual encounters are, therefore, not accounted for.

Table 6-3 presents the distribution of these periods for total periods, periods of instruction, and other professional periods. The periods are grouped into units which could be considered equivalent to a 35-hour-week as a convenience. It should be noted that time sheets for the first 15 students are not available, since these forms were developed after CIL started the program.

The range of total periods is vast indeed; from 15 to 484. Examination of the ratio of periods of instruction to total periods showed that this varied considerably for the students. Table 6-4 shows these data. In interpreting the mean and median proportion, it seems that about 70 percent of the total periods consists of instruction, while 30 percent of the periods are devoted to conferences, sessions with the social worker, psychologist or supervisors, health services, and so on. Undoubtedly the actual length of stay

TABLE 6-3: DISTRIBUTION OF STUDENTS BY PERIODS OF INSTRUCTION AND TOTAL PERIODS OF PROFESSIONAL SERVICES WHILE ATTENDING CIL

A

Frequency of Periods	Total Periods of Instruction and Services Attended: Number	Percent
≤ 34	3	2.4
35 - 69	14	11.4
70 - 104	8	6.5
105 - 139	14	11.4
140 - 174	16	13.0
175 - 209	17	13.8
210 - 244	16	13.0
245 - 279	18	14.6
280 - 314	9	7.3
315 - 349	3	2.4
350 - 384	1	0.8
385 - 419	3	2.4
420 - 454	-	-
455 - 489	1	0.8
TOTAL[*]	123[a]	100.0
Mean[**]	185.6	
Median[**]	193.5	
Range[**]	15 - 484	

B

Frequency of Periods	Periods of Instruction Attended: Number	Percent
≤ 34	13	10.6
35 - 69	13	10.6
70 - 104	19	15.5
105 - 139	24	19.5
140 - 174	21	17.1
175 - 209	17	13.8
210 - 244	10	8.1
245 - 279	3	2.4
280 - 314	-	-
315 - 349	3	2.4
TOTAL[*]	123[a]	100.0
Mean[**]	131.6	
Median[**]	127.0	
Range[**]	6 - 336	

C

Frequency of Periods	Periods of Other Professional Services: Number	Percent
≤ 34	31	25.2
35 - 69	54	43.9
70 - 104	34	27.6
105 - 139	4	3.3
TOTAL[*]	123[a]	100.0
Mean[**]	53.9	
Median[**]	59.0	
Range[**]	1 - 124	

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[a] 15 Students attended before time sheets were kept and not figured in Total.

[*] Due to rounding, percentage totals may not add to exactly 100.0%.

[**] Expressed as periods.

TABLE 6-4: DISTRIBUTION OF STUDENTS BY PERCENT OF PERIODS OF INSTRUCTION TO TOTAL PERIODS

Percent of Periods of Instruction for Total Periods	Students[1]	
	Number	Percent
≤ 24.9	2	1.6
25.0 - 39.9	2	1.6
40.0 - 49.9	5	4.1
50.0 - 54.9	3	2.4
55.0 - 59.9	10	8.1
60.0 - 64.9	16	13.0
65.0 - 69.9	25	20.3
70.0 - 74.9	23	18.7
75.0 - 79.9	16	13.0
80.0 - 84.9	11	8.9
85.0 - 89.9	7	5.7
≥ 90.0	2	1.6
TOTAL*	123	100.0

Mean	67.4%
Median	69.5%
Range	17.6 - 97.8%

[1] 15 Students attended before time sheets were kept.

[*] Due to rounding, percentage totals may not add to exactly 100.0%.

has an influence on these proportions, students need more staff-time while being oriented, and while vision, hearing and health problems, which were present at entrance, are being dealt with.

RE-SCHEDULED INSTRUCTION PERIODS

Examining the staff and student schedules brought out that scheduling was quite complicated, since re-scheduling instruction periods and other service periods seemed to occur quite frequently. The source of the re-scheduling could not be determined reliably, but impressionistically, it seems that students are the cause of this much more frequently than the staff members.*

Table 6-5 illustrates the distribution of the proportion of periods of instruction re-scheduled for the total periods of instruction received by the student. The range indicates that a few students had more re-scheduled classes than the classes they did attend. There were only three students who had no scheduled changes. The mean indicates that close to one-fifth (18%) of scheduled periods of instruction are re-scheduled. This finding highlights the difficulties a program can encounter where the staff abandons rigidity and endorses accomodation to individual students' life problems. It would, however, seem that re-scheduling such a vast proportion of class-periods puts a heavy burden on the structure of the work-flow for the staff. This would be particularly so in light of the average number of periods taken by students.

AVERAGE PERIODS PER WEEK

The average calculated is based on total periods, that is,

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*Staff members' re-scheduling would involve an entire day or morning session, for example, resulting in changes for several students.

TABLE 6-5: DISTRIBUTION OF STUDENTS BY PERCENT OF RESCHEDULED PERIODS OF INSTRUCTION

Percent Rescheduled	Students* Number	Students* Percent
None	3	2.4
1.0 - 4.9	8	6.5
5.0 - 9.9	28	22.8
10.0 - 14.9	27	21.9
15.0 - 19.9	17	13.8
20.0 - 24.9	15	12.2
25.0 - 29.9	9	7.3
30.0 - 34.9	7	5.7
35.0 - 39.9	1	0.8
40.0 - 49.9	3	2.4
50.0 - 59.9	2	1.6
100.0	3	2.4
TOTAL**	123	100.0

Mean	18.0%
Median	14.6%
Range	0 - 152.6%

* 15 students attended before time sheets were kept.

** Due to rounding, percentage totals may not add to exactly 100.0%.

scheduled instruction and other staff periods. Table 6-6 displays the data. The average is 16 periods, which represents less than one half of the number of periods which can be scheduled in one week.* It is true, of course, that the student must have time for lunch and practicing subjects such as Braille and Typing, and, equally obviously, rest periods are necessary. However, in view of the fact that 90 students (65.2%) were residents, and an additional 10 students were both residents and commuters during their attendance at CIL, this mean seems rather low, since it implies an average of only 3.3 periods per day. While it is true that the students are older persons, and that some have health problems, nevertheless they are not admitted if the staff feels that attendance will put them at any kind of risk.

ACHIEVEMENT AND EFFORT

It will be recalled that previous sections discussed the status at admission in terms of the number of skills that were to be taught. The records also contain the status at leaving, and this section will examine the total achievement in terms of time and instruction.

The percentage of skills mastered to those wanted or needed was calculated, and Table 6-7 shows the distribution of these ratios of success. The mean was 68.2% successful completion of skills wanted or needed, the median was 72.7%. Table 6-8 shows the completion rates for the number of skills wanted or needed, and for the number of skills completed. The striking finding is that there is no relationship between the number of skills needed and wanted, and the completion rate. Students who plan to learn a limited number of skills do not perform better or worse than those who expect to learn a large number.

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*Originally 35 per week, then changed to 40 per week.

TABLE 6-6: DISTRIBUTION OF STUDENTS BY AVERAGE TOTAL PERIODS PER WEEK

Average Periods Per Week	Students* Number	Students* Percent
≤ 4.9	1	0.8
5.0 - 7.4	5	4.1
7.5 - 9.9	16	13.0
10.0 - 12.4	24	19.5
12.5 - 14.9	27	21.9
15.0 - 17.4	36	29.3
17.5 - 19.9	10	8.1
≥ 20.0	4	3.3
TOTAL**	123	100.0

Mean - 16 Average periods per week
Median - 13.7 Average periods per week
Range - 2.9 - 22.2 Average periods per week

[*] 15 Students attended before time sheets were kept.

[**] Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 6-7: DISTRIBUTION OF STUDENTS BY PERCENT OF SKILLS COMPLETED

Percent of Skills Completed	Students* Number	Students* Percent
100.0	17	12.4
99.9 - 90.0	15	10.9
89.9 - 80.0	28	20.4
79.9 - 70.0	19	13.9
69.9 - 60.0	17	12.4
59.9 - 50.0	13	9.5
49.9 - 40.0	8	5.8
39.9 - 30.0	6	4.4
29.9 - 20.0	4	2.9
19.9 - 10.0	2	1.5
9.9 - 0.0	8	5.8
TOTAL**	137	100.0

Mean	68.2%
Median	72.7%
Range	0.0 - 100.0%

* One student's record was incomplete and was omitted.

** Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 6-8: DISTRIBUTION OF STUDENTS BY NUMBER OF SKILLS WANTED OR NEEDED AND PERCENTAGE COMPLETED

Number of Skills Wanted Or Needed	Total		PERCENTAGE COMPLETED											
			100.0	90.0 - 99.9	80.0 - 89.9	70.0 - 79.9	60.0 - 69.9	50.0 - 59.9	40.0 - 49.9	30.0 - 39.9	20.0 - 29.9	10.0 - 19.9	1.0 - 9.9	None
	Number	Percent	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
5 - 9	9	6.6	2	-	2	-	-	2	1	-	-	1	-	1
10 - 14	12	8.7	2	3	1	1	1	1	2	-	-	-	1	-
15 - 19	29	21.2	5	4	8	3	2	2	-	3	1	-	1	-
20 - 24	39	28.5	5	1	6	8	6	3	2	2	1	1	2	1
25 - 29	37	27.0	3	5	8	5	6	4	3	1	2	-	1	-
30 - 34	11	8.0	-	2	3	2	2	1	-	-	-	-	1	-
TOTAL*	137	100.0	17	15	28	19	17	13	8	6	4	2	6	2

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* Due to rounding, percentage totals may not add to exactly 100.0%.

Examinations of various characteristics of the students which might be associated with the completion rate found only one such factor, namely, the type of household in which the student lived. Married students living with their spouse showed the most success, proportionately. Married students living with spouse and other family members ranked next. Students living alone came next, and lowest ranking were those living with unrelated individuals, or in institutions or boarding houses. Age, length of having been visually impaired, education, perception of own health status, perception of self as blind, were not associated with success. It would seem possible that living with a spouse can supply the support and encouragement to carry the student to successful completion. From interview data discussed below, it is clear that not all spouses provide such support. Some encourage helplessness and dependence, others are rejecting and hostile.

THE CONCEPT OF "AVERAGE PERIODS PER UNIT LEARNT"

The association between success and effort was examined in terms of the average periods per unit learnt. This average was calculated by dividing total periods of instruction by the number of skills learnt, and by performing the same calculation for total periods of professional services. Table 6-9 shows the means, medians, and ranges for completion rates. There is an exponential relationship between success and both types of periods required by those achieving different success rates. This type of relationship indicates that those with no or little success will not do better no matter how much time they do invest or have invested in them. CIL could apply this finding to set a cut-off point for students to prevent unproductive expenditures of staff and student effort. Such a cut-off point would need to be applied judiciously, as an indicator to evaluate a student's performance, and never automatically. For example, individuals will vary according to the time they

TABLE 6-9: MEANS, MEDIANS AND RANGES OF PERIODS OF INSTRUCTION AND TOTAL PERIODS PER SKILL LEARNT, BY PERCENTAGE OF SKILLS NEEDED OR WANTED AND COMPLETED

Percentage of Skills Needed or Wanted & Completed	Number of Students*	Periods of Instruction Per Skill Learnt			Total Periods Per Skill Learnt		
		Mean	Median	Range	Mean	Median	Range
100.0	17	5.4	6.0	1.5 - 11.0	8.9	9.5	5.0 - 14.4
90 - 99.9	15	6.9	6.8	4.1 - 10.2	9.9	9.6	5.0 - 14.6
80 - 89.9	28	7.7	7.0	3.2 - 12.3	10.7	9.9	4.4 - 16.1
70 - 79.9	18	7.8	7.1	1.3 - 15.0	11.8	10.9	6.3 - 21.3
60 - 69.9	14	10.5	10.2	5.1 - 16.1	14.2	13.4	6.7 - 22.8
50 - 59.9	11	12.4	12.3	4.0 - 29.0	18.1	16.2	6.2 - 49.2
40 - 49.9	5	16.3	14.5	5.8 - 28.0	18.6	16.8	5.8 - 31.9
30 - 39.9	5	19.3	6.2	2.8 - 45.0	26.8	10.8	8.0 - 60.5
20 - 29.9	4	26.7	27.6	11.1 - 40.3	36.7	36.6	18.0 - 48.8
10 - 19.9	1	**	**	(190)***	**	**	(320)***
0.1 - 9.9	4	65.3	51.1	26.0 -124.0	91.5	70.0	53.0 -137.0
None	2	**	**	6.0 - 22.0	**	**	15.0 - 29.0
TOTAL	124	9.6	7.9	1.3 -124.0	13.7	12.3	4.4 -137.0

* 14 Student records were incomplete.
** Not calculated.
*** Single value only.

need to adjust to being at CIL and reaching an adequate level of functioning; some students will vary in the efficiency with which they are acquiring skills over time, etc. The calculations are shown as reference 1 for this chapter.

DIRECT SERVICE STAFF UTILIZATION

The weekly time sheets filled out by the staff were analyzed so that the different teaching and service staff could be examined in terms of allocation of effort. Since the time sheets did not show consistency of terminology to indicate particular activities, the following coding categories were developed:

- Teaching.
- Non-Teaching Student Service: Includes monthly student evaluation and conferences where student is present. For the psychologist this includes student group meetings.
- Home Visits.
- Administration: No rigid definition appears to exist for this term, and it is quite possible that other activities were covered by this, as for example R & D.
- Meetings: All meetings with other staff or personnel where no student is physically present.
- R & D: Activities relating to development of the various forms, testing instruments, formulation of teaching objectives, the computer system and the Teaching Manuals.
- Public Relations: Attendance at, or visits to, groups and organizations to publicize and promote CIL.
- Leave: Vacations, sick leave, compensatory overtime.
- Not Recorded: Periods without entry for type of activity during a day for which other entries have been made.

Note: Lunch periods have not been included in this coding scheme.

Table 6-10 shows the findings for full-time staff only, and omits all part-time staff, substitutes and interns. The data for these latter staff was judged to be incomplete. It should be noted that some of the instruction is given individually, notably O&M, while other classes routinely contain several students, as in the case of Braille, Script and Typing. The first section of the Table is concerned with teaching-staff activities, while the second relates to other direct-service staff. Administrative and clerical staff are not included in this Table.

The percentage of direct teaching ranges from almost 47 percent for Braille, Script and Typing, to about 30 percent for ADL.

The percentage of time spent with students on non-teaching services came to about ten percent for the various areas. This seems a significantly large proportion of teaching-staff time to allocate to these meetings, particularly in view of the percentage devoted to actual teaching and home visits, where they are relevant. The two teaching groups involved with home visits, ADL and O&M, spent a small proportion of their time on these visits. It would seem that this activity could be increased.

The positions of Community and Volunteer Coordinators have been eliminated. It is clear from the distribution of activities that they did not structure time allocation for the elements of their work well, or else that "administration" was a non-specific category in their hands.

COST OF PROGRAM

Accountants' statements for annual income and expenditures were available for the entire period during which the CIL program

TABLE 6-10: TIME USAGE OF DIRECT SERVICE STAFF**

	PERCENTAGE OF PERIODS SURVEYED								
Use Of Time	Braille Script Typing	Abacus	Sensory Devel- opment	O&M	ADL	Psycho- logy	Social Work	Volunt. Coord. (Avoc.)	Comm- unity Coord.
Teaching	46.9	46.2	38.1	37.5	29.8	*	*	*	*
Non-Teaching Student Service	10.2	9.4	10.0	10.5	7.9	62.1	26.1	12.1	4.6
Home Visits	*	*	0.4	3.1	4.0	*	8.1	-	19.4
"Administration"	16.2	17.6	15.1	20.6	23.6	24.8	34.2	55.0	53.0
Staff & Other Meetings	7.3	4.6	9.9	8.6	7.8	2.4	18.0	10.8	7.1
Research & Development	5.3	9.5	8.8	5.7	8.5	1.6	22.6	7.9	3.1
Public Relations	0.2	*	1.1	0.8	1.4	1.3	1.0	0.7	*
"Leave"	10.4	10.4	14.2	10.6	14.5	7.9	9.3	10.7	8.3
Not Recorded	3.8	2.4	2.3	2.7	2.5	-	1.1	2.9	4.5
Total Periods	7126	1225	3620	9259	6532	828	4787	1211	1304
Man-Weeks Surveyed	191	35	97	252.2	164	23.7	129	34	37

* Not applicable

** Does not include part-time staff, substitutes, internes, except for psychologists.

has operated: May 1973 through December 1977. The information for the initial "start-up" period from NOvember 1972 through April 1973, has not been included in the data considered.

Table 6-11 presents the data with detail for all expenses associated with the direct service component of CIL. Total expenses were just under two-and-a-half million, and over 90 percent was spent on direct services. It can be seen that about $300,000, or about 13 percent, was expended for the accommodation of resident students: Rent and Services for Accomodation, and Cafeteria. Portions of the Cafeteria expenses should be allocated for commuting students, and part of the Rent went for non-residential space. The average cost, however, for the 90 residential students, is about $3,000.

Income has originated primarily from the New York Infirmary Fund for the Blind. Over time, increasing amounts have come from reimbursement for Teaching and Training Services for the students, as well as from the sale of the Teaching Manuals. The substantial contribution from HEW which was available for the first five years has not been replaced to the same amounts by further grants from federal and other sources.

Table 6-12 shows trends for several ratios which were constructed to facilitate the interpretation of the expenditure and income data. The first, Teaching and Training Services as a ratio of Total Expenses, shows an increase for each successive year from 1974 to 1977, which amounts to an overall 20-fold increase. The administration has been becoming more effective in obtaining reimbursements.

The second item shows the average "Cost per Individual Referred." It was obtained by dividing Total Expenses by the relevant number of Referrals. The low figure for 1976 is due to an intensified effort to increase the number of referrals. As the next item shows, however, this increase in the number of referrals had only a relatively small impact on the number of individuals admitted as students in 1976/1977.

The third item, that of Total Expenses to Students Admitted, shows the average per student for the individual years and the total period. There are fluctuations from year to year, and, on the whole, the "cost per student" has not varied essentially.

TABLE 6-11: YEARLY EXPENSES AND INCOME FOR 1973 THROUGH 1977

Expenses	Total 1973 - 77	Total 1974 - 77	Percent Total 1974 - 77	1977	1976	1975	1974	May - Dec. 1973
Salary & Related	1,308,734	1,193,921	53.0	282,919	323,988	329,092	257,922	114,813
Office & Trng. Space Rent	127,354	102,714	4.6	2,868	25,986	36,960	36,960	24,640
Student Accomm. & Trng. Space Rent	118,757	113,844	5.1	35,538	32,490	28,105	17,711	4,913
Student Accomodation Services	79,960	79,960	3.5	27,620	52,340	-	-	-
Student Cafeteria	102,530	102,530	4.6	23,479	29,314	27,653	21,984	-
Student Training & Supplies	35,737	35,737	1.6	14,187	14,349	2,598	4,663	-
Student Travel	54,917	54,917	2.4	26,504	15,169	13,234	(n.a.)	-
Training Materials	63,349	63,349	2.8	56,655	3,307	3,387	-	-
MD & RN Services	79,955	79,955	3.5	24,339	27,533	16,060	12,023	-
Medical Consulting Fees	64,783	64,783	2.9	15,167	16,363	16,051	17,202	-
Non-Medical Consulting Fees	98,420	98,420	4.4	32,435	24,392	20,164	21,429	-
Other	318,115	262,071	11.6	66,582	89,223	69,829	49,611	56,044
TOTAL	2,452,671	2,252,261	100.0	608,403	654,454	549,899	439,505	200,410
Income								
Contributions								
NYI Fund for the Blind	1,435,000	1,260,000	57.3	390,000	240,000	340,000	240,000	175,000
DHEW Grants	718,834	678,834	30.9	92,250	208,916	208,334	169,334	40,000
New York Community Trust Grants	15,000	15,000	0.7	15,000	-	-	-	-
Teaching & Training Services	233,015	227,340	10.3	122,794	81,272	18,674	4,600	5,675
Sales of Training Manuals	13,699	13,699	0.6	6,748	4,105	2,846	-	-
Other	4,044	4,044	0.2	1,918	1,592	211	323	-
TOTAL	2,419,592	2,198,917	100.0	628,710	535,885	570,065	414,257	220,675

The final set of averages is an attempt to assess the impact of all the teaching services provided by CIL. A significant component of this is the steady dissemination of the Training Manuals. Sales have been made to individuals and institutions. There is no record of the number of individuals who have been exposed to the Manual in a teaching situation, but the institutions which have purchased the Manuals have indicated that they use Manuals repeatedly. In order to arrive at a conservative estimate of the number of individuals exposed to the Manuals, the number of Manuals sold was required. Since that number was not readily available, it was reasoned that dividing the income from sales by the price of the more expensive edition would give such a conservative estimate of "users." The number of "users" was added to the number of students, and used in the following equation:

$$\frac{\text{Total Expenses (Year)}}{\text{Number of Students (year) plus } \dfrac{\text{Income From Sales (Year)}}{\text{Higher Unit Price (Year)}}}$$

The average cost per person "reached" shows a gratifying decreasing trend.

FLOW OF REFERRED

The flow of those who come in contact with CIL was to follow particular timing in order to avoid delays and consequent frustration and loss of interest. The plan calls for no more than 12 to 16 weeks from initial contact, "Date of Referral," to final disposition, which may be a "Closure" or an "Admission." Once admitted, the plan calls for a 12 to 16-week period of instruction before "Termination." The management of Outreach, Selection, Admission and Termination activities requires reasonable adherence to the time periods postulated so that waiting lists and underutilization may be avoided.

Table 6-13 shows the results of a cohort analysis of the flow

TABLE 6-12: ACTIVITY RATIOS

Activity Ratio	YEAR					
	Total 1973-1977	1977	1976	1975	1974	1973
$\frac{\text{Teaching Income \& Training Manual Sales}}{\text{Total Expenses}}$	.096	.213	.130	.039	.010	.028
$\frac{\text{Total Expenses}}{\text{Persons Referred}}$ (\$)	2,862 (N=787)	3,900 (N=156)	2,182 (N=300)	3,818 (N=144)	2,891 (N=152)	5,725 (N=35)
$\frac{\text{Total Expenses}}{\text{Students Admitted}}$ (\$)	11,199 (N=219)	11,686 (N=56)	10,907 (N=60)	12,788 (N=43)	9,554 (N=46)	14,315 (N=14)
$\frac{\text{Total Expenses}}{\text{Students Admitted \& Copies of Training Manual Sold *}}$ (\$)	2,763 (N=815)	1,866 (N=326)	2,272 (N=288)	2,736 (N=201)	**	**

* Number of Copies Sold = $\frac{\text{Sales Income}}{\text{High Price}}$

** Not applicable, no sales of Training Manuals

TABLE 6-13: FLOW OF COHORTS BY STATUS AND YEAR OF REFERRAL DATE

	Percent of Cohort In Year of Referral				
Interval to Determination	Total	1976	1975	1974	1973
Referral to Closure:					
Shorter than planned	66	76	65	47	50
As planned: 12 - 16 wks.	9	10	9	3	-
Longer than planned	25	16	25	49	50
TOTAL	100	100	100	100	100
Referral to Admission:					
Shorter than planned	53	44	35	64	80
As planned: 12 - 16 wks.	11	8	19	9	5
Longer than planned	36	48	43	27	15
TOTAL	100	100	100	100	100
Admission to Termination:					
Shorter than planned	47	60	41	36	62
As planned: 12 - 16 wks.	23	16	34	17	29
Longer than planned	30	24	24	47	10
TOTAL	100	100	100	100	100
Total Referrals to Final Status:					
Shorter than planned	62				
As planned: 12 - 16 wks.	9				
Longer than planned	29				
TOTAL	100				

of the Referrals through CIL. The individual cohorts are composed of those who share a specific status as well as the calendar year of their Referral Date. The data shows that the time interval from Date of Referral to Closure of those not interested or not eligible has improved over time, so that three-quarters achieve a final determination of their status in less time than has been allowed for, and consequently, fewer are in the selection process longer than planned.

This, however, is not true of those who were ultimately admitted as students. In the earlier years, admission was achieved more rapidly than projected for a larger proportion than occurred later on. In fact, the proportion of "quick" admissions has declined by half. This coincided with an intensified Outreach effort. In addition, very few admissions fell within the expected time-interval at any time, and the proportion, therefore, of those on the waiting list has increased correspondingly.

The length of stay for the students has also undergone changes over time. The proportion staying the projected length has never represented more than one third, and the proportions remaining longer or shorter periods than projected have varied without showing any trend.

The data indicate that the projected interval for Closures is realistic, and that perhaps a shorter period may be set as a goal. Despite the fact, however, that admitted students show a bimodal length of attendance, and proportionately few stay the "normal" period, the presence of the waiting list indicates that planning admissions for available "slots" is proving to be difficult. The average length of stay in this case is a statistic which, here, obviously is misleading. It is correct in terms of arithmetic, but not very useful as a planning device. There is a need for exploring the reasons for so many cases of shorter and longer than projected attendance.

RELATIONSHIP OF REFERRALS TO ADMISSIONS

Table 6-14 shows the numbers of individuals in cohort groups by status and quarter of the year of Referral, that is, three-month intervals. This approach permits the examination of seasonal fluctuation. It is interesting to see that the third quarter, July through September, consistently shows lower volumes than the other quarters. It had been speculated that the fourth quarter with its many holidays and poor weather might also prove to have low volumes.

Figure 6-1 shows the relationship of cohorts of Referrals to cohorts of Admissions by quarter of Referral Date. The third factor also presented graphically is the ratio of Admissions to total Referrals. It is clear from these data that the proportion of Intake has delined over time. This goes counter to expectation since one would imagine that there would be an increase in experience and a consequent increase in this ratio. There has been considerable turnover in personnel working with Outreach, as well as experimentation with the type of training such a person should have, and this undoubtedly contributes to the situation.

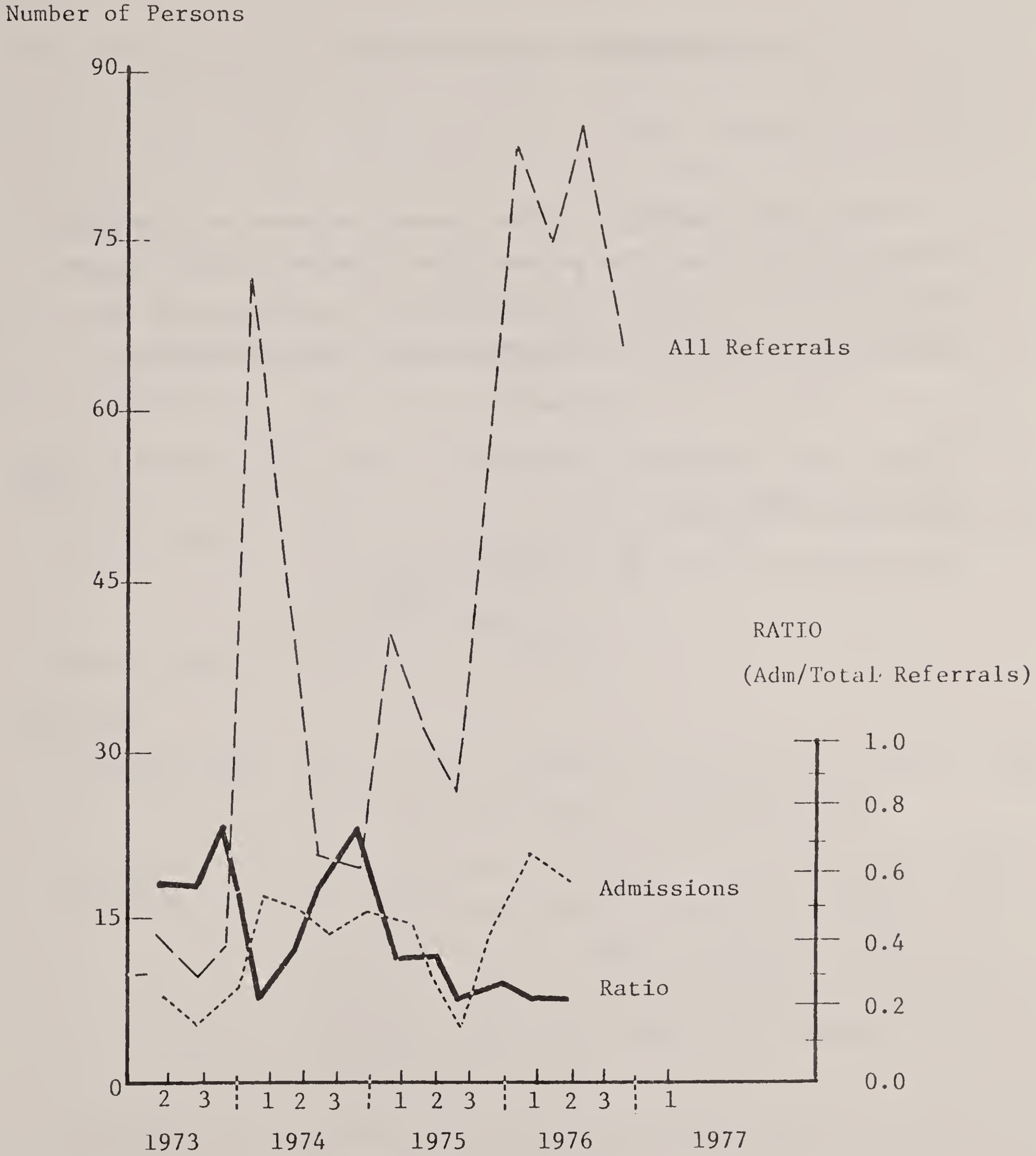
Finally, these data indicate that pressure to increase Outreach and number of referred in order to increase Admissions will indeed result in an absolute, though small, numeric increase of Admissions. It appears, however, that an inverse relationship also exists when ratios of referred to admitted are considered. A problem still to be solved is the definition of the population segments which yield high rates of admissions.

TABLE 6-14: SIZE OF COHORTS BY YEAR AND QUARTER OF REFERRAL DATE

		COHORTS				
Year and Quarter		Total Processed	Admitted	Closed	In Intake	Terminations
1973:	2nd	14	8	6	-	8
	3rd	9	5	4	-	5
	4th	11	7	4	-	9
	TOTAL	34	20	14	-	22
1974:	1st	70	15	55	-	17
	2nd	38	14	24	-	15
	3rd	11	6	5	-	13
	4th	20	13	7	-	14
	TOTAL	146	55	91	-	59
1975:	1st	39	13	26	-	13
	2nd	31	10	21	-	10
	3rd	26	7	18	1	5
	4th	48	13	35	-	13
	TOTAL	144	43	100	1	41
1976:	1st	81	20	59	2	20
	2nd	77	22	44	6	16
	3rd	83	14	56	13	6
	4th	59	3	39	17	n.a.
	TOTAL	300	59	198	43	42
1977:	1st	44	n.a.	24	20	n.a.
	2nd	8	n.a.	n.a.	8	n.a.
	TOTAL	52	n.a.	24	28	n.a.

n.a. - Not applicable.

FIGURE 6-1: TOTAL REFERRALS, ADMISSIONS AND RATIO OF ADMISSIONS TO REFERRALS, BY YEAR AND QUARTER OF REFERRAL DATE



REFERENCE - CHAPTER SIX

1. The relationship of the average number of periods of instruction and the percentage of completion, shown in Table 6-9, can be represented by the classical expression of a curve for exponential relationships:

$$y = ax^b$$

Solving this equation produced an index of determination value of 0.95, where

$$a = 296.337 \quad \text{and} \quad b = -0.813.$$

CHAPTER SEVEN

RESULTS OF TESTS AT INTERVIEW

THE TESTS

The interviewers, when conducting personal interviews, administered the questionnaire and the tests indicated for the individual respondent. The selection of the appropriate tests was indicated on a form prepared from a preliminary reading of the student's record. The interviewer's instructions were to test at the level of a particular skill and, when the respondent appeared not to do well or refused, to test at the next lower level in that skill and to continue this process in case of further inadequacy. The tests were grouped as follows:

ADL

Higher Level: Make a cup of coffee. When it was impossible to make coffee, a powdered beverage was substituted.

Lower Level: Slice a vegetable.

BRAILLE

Braille Aids: Tell time, identify coins; test either, both or the single skill, as indicated.

Reading: Interviewers carried six samples for each of the three levels in both standard and giant Braille. The appropriate card was read by the respondent and the interviewer marked errors and material attempted in a five-minute span.

Writing: Text was read to the respondent and the sample collected.

ELECTRONIC DEVICES	Tests were developed for the telephone, TBM and Tape Cassette Machine. When respondents had learnt only one of these, it was tested. For those having learnt several, the sequence of testing was: Tape Cassette Machine, TBM, and finally, the telephone.
ORIENTATION & MOBILITY (O&M)	Two levels were designed for this area. One was outdoor travel which consisted of questions about aspects of independent outdoor travel. For those who no longer went outdoors independently and those who had not mastered this skill, a test for using the interviewer as a sighted guide was administered.
SCRIPT	Level I was tested by asking the respondent for a signature. Level II consisted of dictation to test the ability to write text in terms of margins, spacing lines and legibility. Level III was tested by asking respondents to write a check with the interviewer supplying the details such as name of recipient and amount, but not mentioning date and signature.
TYPING	As in the case of writing Braille, the interviewer dictated according to the level learnt by respondents. Level I consisted of words. Level II consisted of words and punctuation. Level III required addressing an envelope.
SENSORY DEVELOPMENT	Sensory Development was evaluated by two observations, namely; maintainance of eye contact as the interviewer deliberately moved

about, and secondly, ability to move about the room and maintaining orientation during movement. Formal tests were developed for Level I, Locating Dropped Objects, and Level II, Locating and Picking Up Dropped Objects.

The tests were limited to these areas since there was a problem with time. Outdoor travel would have required more time than could be justified in terms of the questionnaire and other tests.

Interviewers were instructed to stop specific tests when the respondent performed poorly or in a manner that was a safety risk. Specific instructions for such intervention were given for each test.

The respondents reached by telephone were asked questions about performing at the appropriate level in terms of utilizing that skill and asking how much trouble they had when doing the task. When they indicated no longer performing at a particular level, questions about the next lower level were asked. The question for Independent Outdoor Travel was identical, and, obviously no observations about Sensory Development skills could be made.

INTERPRETATION OF THE TESTS

When "grading" tests, it was decided to consider ability to accomplish the task and doing so safely where safety was a significant factor, such as protecting oneself when picking up a dropped object, slicing a vegetable, using the stove, or pouring hot water. The standards used for evaluation were developed with staff from CIL. Samples of Braille Script, Typing and Writing were graded by CIL staff not involved in teaching the particular respondents. The "products" were not identifiable, except in the case of signature, in any case.

THE RESULTS OF THE TESTS

The tables showing the results of the tests present the data from personal interviews separately from those obtained by telephone interviews. Percentages are shown only when they seemed appropriate, since the numbers involved were quite small. There were 91 personal and 30 telephone interviews: A total of 121 interviews.

ADL SKILLS

Making coffee was an appropriate test for 77 respondents, and Table 7-1 shows the results. About two-thirds made coffee well, but only 13 of these followed all or most of CIL's safety rules. Forty-one made coffee without spilling or other accidents, but performed in such a way that scalding, burning and spilling were not being prevented systematically. Six did not do well, and two could not make coffee without "making a mess." About 17 percent no longer make coffee, or refused to do so, and in two interviews the interviewers did not use this test since the repondents were not well enough to do so.

The telephone respondents claimed to be able to make coffee without difficulty, except for one who admitted having trouble, and the three who no longer do so. In view of the findings based on observation, it may be assumed that a large portion of those interviewed by telephone who claim to make coffee easily also have abandoned systematic safety measures.

Those who no longer make coffee, do not make it well or did not learn this skill at CIL, were asked to slice a cucumber. There were 15 such respondents among the personal interviews, and one among the telephone interviews. Eight sliced the vegetable safely and well, one did not do well, four no longer use this kind of skill. In two cases, the interviewer deleted or omitted the test.

TABLE 7-1: RESULTS OF TESTS OR QUESTIONS FROM PERSONAL AND TELEPHONE INTERVIEWS FOR SKILLS IN ADL

Results	Making Coffee Number		Slice Vegetable Number
Personal Interviews (N=91)			
Did well CIL style	13		8
Did well own style	41	(53.2%)	-
Barely acceptable	6		1
Not acceptable	2		-
No longer do, refused	13	(16.9%)	4
Not possible to test	2		1
Omitted in error	-		1
TOTAL	77		15
Telephone Interviews (N=30)			
Do well	24		-
Cannot do at all	1		1
No longer do	3		-
TOTAL	28		1

The single telephone respondent reported no longer using this skill.

BRAILLE AIDS

In both tests, a) telling time and b) coins, interviewers recorded whether vision or touch were employed. The results are shown in Table 7-2. In the case of telling time, two persons did not have a watch or clock available to them, one was too shaky to be tested, and in one case the interviewer omitted the test in error. Failures occurred among 10 persons who required touch to tell time, and an additional seven either erred by up to 15 minutes, or moved the hands by that much. About three-quarters, 52 of the 73, could tell time accurately.

Interviewers recorded that many of those who identified coins by touch also could identify them visually, but enjoyed demonstrating their skill of using touch. Overall, about 80 percent identified coins correctly, eleven did not do so. One of these would be in serious trouble financially, six would make mistakes only some of the time. It is of interest to note that only among telephone interviews were there respondents who said that they no longer attempt to handle coins or cash in any form.

The telephone version of telling time was to ask the respondent to say what time it was, and 19 of the 25 asked could do so accurately or within five minutes; five said they no longer attempt to tell time.

READING AND WRITING BRAILLE

The findings of the telephone and personal interviews show great discrepancy as seen by Table 7-2. When encountering a request for actual performance, about two-thirds either said they no longer read and/or write Braille, or refused to do the test,

TABLE 7-2: RESULTS OF TESTS OR QUESTIONS FROM PERSONAL AND TELEPHONE INTERVIEWS FOR SKILLS IN BRAILLE AIDS, BRAILLE READING AND WRITING

	BRAILLE AIDS				BRAILLE	
Results	Vision Number	Touch Number	Vision Number	Touch Number	Reading Number	Writing Number
Personal Interviews (N=91)						
Did well	28	24	8	51	6 (13.0%)	1 (2.6%)
Barely acceptable	-	7	3	7	-	1
Not acceptable		10	1	-	8	12
No longer do, refused	-	-	-	-	32 (69.6%)	24 (63.2%)
No equipment	2*		-		-	-
Not possible to test	1*		1*		-	-
Omitted in error	1*		1*		-	-
TOTAL	73*		72*		46*	38*
Telephone Interviews (N=30)						
Do well	19*		21*		12 (66.7%)	13 (72.2%)
No longer do	5		3		6	5
Omitted in error	1		-		-	-
TOTAL	25		24		18	18

* No distinction between vision or touch for these results categories, nor for telephone interviews.

though claiming that they could do the task. Of those who did the tests, more did very badly than did well. A much smaller proportion of the telephone respondents said they had given up Braille. How many of those who said they used these skills without difficulty actually do use them adequately cannot be determined in view of the lack of testing.

ELECTRONIC DEVICES

Relatively few persons were limited or reduced to being tested for dialing the telephone (Table 7-3). Half of these either had no phone at all, or lived in a situation where they could not dial, but had to go through a switchboard. Only one, who has the opportunity to do so, no longer attempts dialing.

TBM:

Not quite half of those to be tested could handle this machine easily, about one quarter either had no machine or no longer used it, and, unfortunately, about 14 percent were not tested in error. These omissions were due to failure to test on this level when the result of the test for the tape cassette machine indicated applying the TMB test. Again, and not taking account of omissions in error, the telephone interviews yielded different findings; proportionately more respondents claimed that they use the TMB. Some of those without the machine had tried to obtain one and had been unsuccessful, others did not know how to have it repaired.

Tape Cassette Machine:

Even fewer, proportionately, still use this device and use it well. More either no longer use it, or do not have the necessary equipment. Those who had a machine which was not in operating condition reported lack of knowledge about taking care of it, or not knowing where to go for repairs, what to do about buying tapes, batteries, and so on. It would seem that the instruction for this skill should include these practical aspects.

TABLE 7-3: RESULTS OF TESTS OR QUESTIONS FROM PERSONAL AND TELEPHONE INTERVIEWS FOR SKILLS IN ELECTRONIC DEVICES

	Telephone	TBM[1]	Tape-Cassette Machine
Results	Number	Number	Number
Personal Interviews (N=91)			
Did well	5 (41.7%)	21 (47.7%)	23 (37.1%)
Barely Acceptable	-	5	8
Not Acceptable	-	-	1
No Longer Do, Refused	1 (16.7%)	6 (27.3%)	14 (46.8%)
No Equipment	1	6	15
Not Possible to Test	5	-	-
Omitted in Error	-	6	-
TOTAL	12	44	62
Telephone Interviews (N=30)			
Do Well	1	4	22 (78.6%)
No Longer Do	-	1	6
Omitted in Error	-	4	-
TOTAL	1	9	28

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[1] TMB: Talking Book Machine

GROOMING

Table 7-4 shows that most of the respondents did well with this test or reported doing well in caring for their clothing. The six where the test was not possible either had no hangers or closets where they lived, and used hooks, or else were physically unable to do the task. Four either did not do well or could not do the task acceptably.

Fewer interviewed by phone expressed satisfaction with the way they could look after their clothing, four reported not doing this skill well enough to be satisfied, and two reported being unable to handle this skill at all, even though they continued to attempt it.

ORIENTATION AND MOBILITY (O&M)

Independent Outdoor Travel:

Those who had learnt elementary or advanced independent outdoor travel were asked about such activities. A total of 22 (18 personal and 4 telephone interviews) no longer do such independent travel (Table 7-5). Seven had acquired seeing eye dogs since leaving CIL. Only one person could not go outdoors at all, but did say that people arranged for transport by car. Subway travel, not shown in the Table, had largely been given up; bus travel was still reported by those who had learnt that skill. Two respondents volunteered that they were able to handle extensive trips using all means of transportation independently. One of those no longer going outdoors alone had stopped because she was mugged shortly after leaving CIL, and two others are afraid for their safety in their specific neighborhoods. It would seem that other factors then, aside from confidence, play a significant role in this area.

Sighted Guide:

About two-thirds did this task well when tested, and the rest did minimally well or reported not being able to use this skill at

TABLE 7-4: RESULTS OF TESTS OR QUESTIONS FROM PERSONAL AND TELEPHONE INTERVIEWS FOR SKILL IN GROOMING

	Hanging up Coat
Results	Number
Personal Interview (N=91)	
Did Well	79 (87.8%)
Barely Acceptable	1
Not Acceptable	3
Not Possible to Test	6
Omitted in Error	1
TOTAL	90
Telephone Interview (N=30)	
Do Well	23 (79.3%)
Do, But Not Well	4
Cannot Do at All	2
TOTAL	29

TABLE 7-5: RESULTS OF QUESTIONS FROM PERSONAL AND TELEPHONE INTERVIEWS FOR SKILLS IN ORIENTATION AND MOBILITY

	Independent Outdoor Travel		Sighted Guide
Results	Number	Results	Number
Personal Interviews (N=91)			
Go outdoors alone	54 (68.4%)	Did well	16 (66.7%)
No longer go outdoors alone	18 (22.8%)	Barely acceptable	6
Go outdoors alone, do it badly	1	TOTAL	24
Seeing Eye dog	5		
Can't walk outdoors at all	1		
TOTAL	79		
Telephone Interviews (N=30)			
Go out alone	21 (77.8%)	Do well	4
No longer go out alone	4	Cannot do at all	1
Seeing Eye dog	2	TOTAL	5
TOTAL	27		

all well. Those who tested badly did not seem aware of their inadequate performance.

SCRIPT:

The results of testing for the various levels are shown in Table 7-6. The totals indicate those to be tested at specific levels, while the numbers for the outcomes report the results of all tests at that level, whether due to initial requirement or follow-up testing after failure or refusal at a higher level. The findings are that most individuals can still produce an acceptable signature, while, proportionately, the check-writing skill most frequently had not been maintained, or is no longer used. The skills of writing letter or notes have undergone changes indicating intermediary degrees of deterioration or decrease in utilization.

TYPING

Table 7-7 shows a discrepancy for personal and telephone outcomes, with those interviewed by telephone reporting proportionately much more ability and utilization. Not a single telephone respondent said that he did not have a typewriter, but seven of those to be tested either did not have one at all, or it was not in working condition. The tests showed that only one-fifth were able to type acceptably at the level at which they were to be tested, and 26 said that they no longer used their typewriter.

SENSORY DEVELOPMENT

The four aspects are reported in Table 7-8. Eye contact was maintained well by four out of five respondents, and half of the rest essentially abandoned this behaviour. Interviewers observed that the same proportion of respondents were well oriented to their

TABLE 7-6: RESULTS OF TESTS OR QUESTIONS FROM PERSONAL AND TELEPHONE INTERVIEWS FOR SKILLS IN SCRIPT

Result	Signature (I) Number	Letters (II) Number	Check (III) Number
Personal Interviews (N=91)			
Did level well	52	28	7
Not acceptable at level	5	3	11
No longer do, refused, level	2	2	5
Omitted in error	2	2	-
Initial Level To Start*	18	27	23
Telephone Interviews (N=30)			
Do level	20	10	4
No longer do	3	7	3
Initial Level To Start*	5	11	7

* Number is not sum in column, but indicates respondents who were to be tested beginning at that level.

TABLE 7-7: RESULTS OF TESTS OR QUESTIONS FROM PERSONAL AND TELEPHONE INTERVIEWS FOR SKILLS IN TYPING

Results	Number of Respondents	
Personal Interviews (N=91)		
Did level well	11	(22.9%)
Barely acceptable	2	
Not acceptable	6	
No longer do, refused	22	(60.4%)
No typewriter	7	
TOTAL	48	
Telephone Interviews (N=30)		
Do well	13	(76.5%)
No longer do	4	
TOTAL	17	

TABLE 7-8: RESULTS OF OBSERVATIONS, TESTS OR QUESTIONS FOR SKILLS FROM PERSONAL AND TELEPHONE INTERVIEWS IN SENSORY DEVELOPMENT

	S K I L L S			
Result	Locate Dropped Object	Locate & Pick Up Dropped Object	Eye Contact	Room Orientation
Personal Interviews (N=91)				
Did well, CIL style	6	8 (19.5%)	62 (79.5%)	39 (43.8%)
Did well, own style	-	20 (48.8%)	-	37 (41.6%)
Barely acceptable	2	3	8	4
Not acceptable	-	2	8	3
Not possible to test	-	1	-	2
Omitted in error	-	1	-	1
Vision adequate	1	6	-	3
TOTAL	9	41	78	89
Telephone Interviews (N=30)			NA*	NA*
Do well	2	8		
Do, but not well	1	1		
Cannot do at all	-	-		
TOTAL	3	10		

*NA - Observation not applicable to telephone interview.

living space, but almost half of these did not utilize systematic orientation devices. It is, of course, quite possible that long-term familiarity with the environment obviates such techniques. One respondent banged into furniture several times and explained that his wife, a chronic furniture shifter, had redone all the rooms two days previously. One was not able to move about in his tiny room in a Single Occupance Residence hotel, which permitted almost no movement. Three had adequate enough vision not to require such techniques.

LOCATING DROPPED OBJECTS

Most respondents were tested for, or asked about, locating and picking up a dropped object. The interviewer dropped a Braille Slate, when not observed by the respondent, and asked that it be found and picked up. One respondent had a hearing problem and was not tested; six could see well enough to locate the slate visually. Those who did well (about two-thirds) did not always use self-protection techniques, in fact, only one third did so. Since the test was done in a familiar environment it may not have been a realistic test for the use of such safety techniques, still, some respondents did employ the techniques. Those interviewed by phone were asked about their skill of locating dropped objects, and accidents when locating and picking them up. Several said they had problems doing this, and that accidents frequently, or often, happened to them when attempting this.

SKILLS NO LONGER USED

In view of the number of individuals who said they no longer use specific skills, an analysis of the investment of instruction involved in such unused skills was made. There were 83 individuals who gave up one or more skills. Since it became clear that giving up Braille Reading and/or Writing and Typing, which involved large amounts of instruction, and since these were the skills most frequently given up, they are presented specifically. No data from time sheets was available for nine of the 83 involved.

Table 7-9 shows the frequency distribution of students giving up skills, by the number of periods of instruction that were involved. It is evident that Braille and Typing account for much of such unfruitful instruction. The values for the mean periods of instruction as well as the upper range values show that considerable numbers of instruction periods are involved.

Table 7-10 shows the same information in terms of the proportion these periods of instructions represent of the total periods of instruction received by respondents while studying at CIL. Values for means and ranges show that almost 25 percent of total instruction was accounted for by instruction in skills given up after returning home. The values for the upper ranges are considerable also, reaching 65 and 70 percent.

Examination of individuals giving up skills, in terms of their completion rate (the proportion of skills learnt of the numbers of skills wanted and needed) showed that skills were dropped by respondents, regardless of their achievement at CIL (Table 7-11).

Table 7-12 shows the values for means, medians and ranges of percentage of instruction periods "wasted," by completion rates. Some of these values could not be calculated meaningfully, but the missing data does not indicate that it disturbs the significance of the findings. Across the board, then, it seems that these two areas, optimally consisting of 10 skills, are potentially expensive and inappropriate instruction and learning efforts for most students.

TABLE 7-9: DISTRIBUTION OF RESPONDENTS BY PERIODS OF INSTRUCTION RECEIVED IN SKILLS NO LONGER USED

	STUDENTS			
	Gave Up 1 or More Skills	Gave Up Braille Reading and/or Writing	Gave Up Typing	Gave Up Both Braille and Typing
Periods of Instruction	Number	Number	Number	Number
1 - 9	16	5	1	-
10 - 19	13	5	5	-
20 - 29	16	13	4	1
30 - 39	5	2	6	1
40 - 49	5	3	8	2
50 - 59	4	4	1	1
60 - 69	2	1	1	2
70 - 79	3	2	1	2
80 - 89	3	1	-	1
90 - 99	4	1	-	3
100 - 149	2	-	-	1
≥150	1	-	-	1
Sub-Total	74	37	27	15
No Information	9	4	5	3
TOTAL	83	41	32	18
Mean Periods	35.5	32.8	34.0	76.3
Median Periods	24.0	24.0	35.0	73.0
Range Periods	1 - 161	3 - 98	8 - 72	26 - 150

TABLE 7-10: DISTRIBUTION OF RESPONDENTS BY PERCENTAGE OF TOTAL PERIODS OF INSTRUCTION REPRESENTED BY INSTRUCTION IN SKILLS GIVEN UP

Percent of Periods of Total Instruction	STUDENTS Gave Up 1 or More Skills Number	 Gave Up Braille Reading and/or Writing Number	 Gave Up Typing Number	 Gave Up Both Braille and Typing Number
1.0 - 9.9	19	9	3	-
10.0 - 19.9	19	13	9	-
20.0 - 29.9	16	9	10	1
30.0 - 39.9	9	6	4	5
40.0 - 49.9	5	-	1	5
50.0 - 59.9	2	-	-	1
60.0 - 69.9	4	-	-	3
Sub-Total	74	37	27	15
No Information	9	4	5	3
TOTAL	83	41	32	18
Mean %	23.4	25.4	21.2	44.1
Median %	17.9	16.1	25.0	45.1
Range %	1.2 - 69.7	1.7 - 37.0	4.7 - 48.8	22.0 - 65.0

TABLE 7-11: DISTRIBUTION OF STUDENTS WHO NO LONGER USE SOME SKILLS BY THE PROPORTION OF INSTRUCTION PERIODS REPRESENTED BY THESE SKILLS AND BY THE COMPLETION RATE OF SKILLS NEEDED & WANTED

	COMPLETION RATE - PERCENT											
Percent of Instruction Periods for Skills Given	Total	100.0	90.0 - 99.9	80.0 - 89.9	70.0 - 79.9	60.0 - 69.9	50.0 - 59.9	40.0 - 49.9	30.0 - 39.9	20.0 - 29.9	10.0 - 19.9	1.0 - 9.9
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
1.0 - 9.9	19	4	1	6	1	3	1	1	1	-	-	1
10.0 - 19.9	19	2	3	2	2	4	3	-	1	1	-	1
20.0 - 29.9	16	2	2	3	3	2	2	1	1	-	-	-
30.0 - 39.9	9	1	1	2	2	2	1	-	-	-	-	-
40.0 - 49.9	5	1	-	3	-	-	-	-	-	1	-	-
50.0 - 59.9	2	-	1	-	1	-	-	-	-	-	-	-
60.0 - 69.9	4	-	-	2	2	-	-	-	-	-	-	-
Sub-Total	74	10	8	18	11	11	7	2	3	2	-	2
No Information	9	1	-	-	1	3	2	1	1	-	-	-
TOTAL	83	11	8	18	12	14	9	3	4	2	-	2
Percent	68.6	64.7	53.3	72.0	66.7	82.3	81.8	50.0	100.0	66.7	-	33.3

TABLE 7-12: MEAN, MEDIAN AND RANGE OF PERCENT OF INSTRUCTION PERIODS RECEIVED IN SKILLS GIVEN UP, BY COMPLETION RATE

Completion Rate (Percent)	Number of Students	PERCENT OF INSTRUCTION PERIODS		
		Mean	Median	Range
100.0	10	15.4	16.7	2.6 - 40.3
90.0 - 99.9	8	28.1	20.3	9.7 - 57.8
80.0 - 89.9	18	26.6	23.7	1.2 - 69.7
70.0 - 79.9	11	29.8	24.3	1.7 - 60.8
60.0 - 69.9	11	19.3	18.7	2.1 - 38.6
50.0 - 59.9	7	18.4	13.6	1.5 - 36.8
40.0 - 49.9	2	*	*	6.6 - 23.8
30.0 - 39.9	3	*	*	3.8 - 25.3
20.0 - 29.9	2	*	*	10.7 - 47.2
10.0 - 19.9	-	-	-	-
1.0 - 9.9	2	*	*	7.4 - 11.6
TOTAL	74	23.4	17.9	1.2 - 69.7

* Not calculated; too few cases.

CHAPTER EIGHT

THE RESPONDENTS

As was mentioned before, 91 personal interviews and 30 telephone interviews were conducted, but 17 individuals were not available for interviewing. At the beginning of the field work, three were known to have died, and the remaining 135 received letters from the director of CIL, advising them of the study and asking their cooperation when an interviewer called them for an appointment.

The reactions to this letter and initial interviewer contact were remarkable, there was not a single refusal, and many warm responses. Former students were pleased with this continuing interest in them; they sent personal messages to CIL staff, made requests and gave reports of themselves. In their final reports, the study's highly experienced interviewers commented on how unusually easy this assignment had been.

There were no break-offs by respondents, but in a few cases interviewers did not insist on completing tasks when respondents appeared to become too tired. The personal interview and tests averaged about two hours, and the telephone interviews were not appreciably shorter.

The unusual degree of cooperation, though not quantifiable, should be taken into account as evidence that, despite specific critical answers and comments, CIL was a pleasant experience for almost every single former student who was interviewed.

THE NON-RESPONDENTS

The 17 who were not interviewed differed from the 138 original group by the following characteristics:

1) Sex:

   Almost three-quarters of the non-respondents were female, while 54 percent of the 138 were female.

2) Age:

   Proportionately, but not significantly, more were in the age group up to 70 years than in the total former student group.

3) Education:

   About 94 percent had up to, and including, high school graduation; about 74 percent of the total group were in this category.

4) Occupation:

   About 47 percent were housewives, but only about 19 percent of the total group had this status.

5) Perception of Self as Blind:

   About 79 percent thought of themselves as blind; about 52 percent of the total group reported such identification.

6) Number of Skills Needed and Wanted:

   Proportionately many more planned fewer skills than in the total group.

7) Completion Rate:

   About 53 percent accomplished 0-39 percent of the number of skills wanted and needed; the total group's porportion was about 18 percent.

The rest of the characteristics were distributed similarly in both groups. The group not interviewed contained a large number of those who had died or were too ill to be interviewed. They had constituted a large part of those who had achieved rather little in terms of skills learnt by the time they left CIL.

THE INTERVIEW DATA

The questionnaire was structured to obtain information on several areas, namely:

1. Changes in Livng Arrangements
2. Current Life Style
3. Changes in Health and Vision Status
4. Additional Training, Services, Equipment
5. Self Perception as Blind and Attitudes About the Blind
6. Self Evaluation of Ability to Handle Everyday Living Before and After CIL
7. Opinions, Attitudes and Suggestions About CIL and the CIL Experience
8. Benefits of Attending CIL

THE CHANGES IN LIVING ARRANGEMENTS

Almost 70 percent of the respondents were still living at the same address and in households of the same compositions as at the time of attending CIL. Most of those who had moved had moved locally. Consequently, of these 23 percent, or 28 repondents, all but four were still in the same area; nine had changes in the composition of the household in which they lived, four had moved twice, and the rest had moved just once. The changes in household composition were significant in several cases. Two respondents had separated from their spouses and now live alone, one other set up housekeeping with a spouse again after having been separated at the time of attending CIL, and one had to institutionalize his wife after his return home.

Other significant changes were for three respondents who had begun to live in institutional settings; one respondent who had been institutionalized at time of admission had lived by himself for a time, but then moved to sheltered housing. No changes occurred for two others who were in institutions at time of admission and returned to them.

The mobility and other changes in living arrangements are particularly significant for the visually impaired since they must deliberately learn new environments, indoors and out, in order to retain mobility. This often requires an O&M teacher. By means of home visits, CIL assisted some of those who moved. For those who were too far away, or did not ask CIL staff for this assistance, state agencies for the blind may arrange assistance. In one instance, the agency had not responded as yet, even though more than half a year had passed, and the respondent was essentially housebound, since a shift from urban to rural living was involved.

The changes reported in terms of significant change of household help were few indeed. Three such changes occurred: one consisted of obtaining full-time help because another household member had become bedredden; two others increased the amount of help, though not specifically because of the respondents' vision impairment.

The current housing arrangements of respondents at time of interview are shown in Table 8-1, as follows:

TABLE 8-1: HOUSING

Type	Number
Apartment	67
House	37
Residential Hotel	3
Sheltered Housing	6
Boarding	2
Institution	6
TOTAL:	121

Aside from the eight repondents who lived as boarders or in institutions, 62 lived with other persons, 49 alone, and two alone, but very close to family, as for example, in the same building but in a separate apartment.

Those who lived alone were asked if they had any help, and if so, how frequently this help was available. Only one person reported having no help at all. The distribution is shown in Table 8-2, as follows:

TABLE 8-2: FREQUENCY OF HELP

Frequency	Number
Daily	7
Less than daily, but regular	20
Not regular	20
24 hours, not live-in	1
None	1
TOTAL:	49

Those with daily help either could afford this help and engaged it regardless of vision impairment (1 case), or else had this help supplied as part of the service in residential hotels or in some of the Sheltered Housing. None of the respondents then, who live alone, had daily help because they could not cope. A majority, essentially, have someone come in part-time during the week, either routinely, or as they can arrange it or afford it. The comments, when volunteered, indicate that irregular arrangements occur because the help is unreliable and unpredictable in some instances, but was intended to be regular. Many of the respondents mentioned that they needed help because they were getting old and/or arthritic. It seems that frequently the assistance required is not completely due to visual impairment.

Those who lived with other people were not only asked about the relationship, but also how much of the time this other person was at home during the day. The household composition is shown in Table 8-3, as follows:

TABLE 8-3: HOUSEHOLD COMPOSITION

Composition	Number
With spouse only	35
With spouse & other family	8
With other family only	16
Un-related other	3
Assigned roommate	1
Child, under 18	1
TOTAL:	64

The two persons living alone but close to family were included in this tabulation. The majority, 43 respondents, lived with a spouse; only a few of the couples had children or other relatives living with them, and four lived with unrelated persons.

The frequency with which these household members are available is shown in Table 8-4, as follows:

TABLE 8-4: HOUSEHOLD MEMBER AT HOME

Frequency	Number
Most of the time	39
Some of the time	20
Very little time	3
Other	2
TOTAL:	64

The majority of those who had someone with them at home most of the time were those living with their spouses. Others had spouses who were working and away a large part of the day. A wife whose work requires a great deal of travel must leave the respondent alone for long stretches of time. Family members, usually children, also were out working, as a rule. In a few cases the respondent is the one who is out a great deal of the time, and clearly does not depend on the availability of assistance from someone at home. It is, however, not justifiable to assume that the mere physical presence of a spouse, or some other person, meant that supportive, helpful assistance was available. As will be discussed later, some of the respondents live in hostile, non-supportive situations.

The six institutionalized respondents will also be discussed later.

CHANGES IN HEALTH AND VISION STATUS

Respondents were asked if their health had changed since leaving CIL, and what the reason for such changes was (Table 8-5). In view of the age of the total group, it is not surprising that even though 61 said their health was the same, 37 said it was worse, and only 18 percent said it was better. Four said that their health had been worse, but was now returned to the same status as at the time of leaving CIL, and finally, one could not decide how to answer this question.

TABLE 8-5: CHANGE IN HEALTH STATUS SINCE LEAVING CIL

Type of Change	Number
No change	61
Worse	37
Better	18
Was worse, same now	4
Don't know	1
TOTAL:	121

This data may be interpreted by comparing it to the self-assessment of health status obtained as part of the home interview conducted during the intake process. Table 8-6 shows the cross tabulation. The proportion that reported no change in status ranges between 59 and 50 percent for each of the four statuses at home interview. There are small increments among the proportions reporting "same" from previously reported "poor" to "excellent." The reverse direction of differential changes occurs for those reporting a "worse" status now; more of those previously saying "poor" than those saying "excellent" health say their health is now worse. This concordance is one which has been found in many other studies; self-assessment of health status tends to be confirmed by follow-up studies of morbidity and mortality, and its implications for CIL will be discussed more fully later on. Of particular importance is the finding that

TABLE 8-6: SELF-REPORTED HEALTH STATUS AT HOME INTERVIEW AND FOLLOW-UP INTERVIEW

Status At Follow-Up Interview	STATUS AT HOME INTERVIEW											
	Total		Excellent		Good		Fair		Poor		No Answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Same*	65	53.7	10	58.8	27	54.0	16	53.3	7	50.0	5	50.0
Worse**	37	30.6	3	17.6	15	30.0	8	26.7	6	42.9	5	50.0
Better	18	14.9	3	17.6	8	16.0	6	20.0	1	7.1	-	-
Don't Know	1	0.8	1	5.9	-	-	-	-	-	-	-	-
TOTAL***	121	100.0	17	100.0	50	100.0	30	100.0	14	100.0	10	100.0

* Includes 4 saying "became worse, now same."

** Includes 1 saying "temporarily worse."

*** Due to rounding, percentage totals may not add exactly to 100.0%.

age was not associated with deterioration of health status.

Those who said their health was worse now frequently gave more than one reason (Table 8-7). The same frequency of mention was made of "getting older," in terms of being less strong than before, and of being limited by an existing heart condition. Arthritic pains were common, and mentioned as either being generally limiting or specifically limiting, such as not doing things because of pain in hands or arms. General mention was made that a condition, already existing at the time of attending CIL, had become worse. This was particularly mentioned in reference to diabetes. The deterioration of health added even more of a burden for nine because they had become "nervous." The implication appears to be that they have become irritable, anxious, don't sleep as well as formerly, and worry about their health status. One respondent was housebound because of deterioration of a cardiac condition coupled with arthritis; two reported that they were in worse health, but then qualified by saying that this was temporary. The respondent with sciatica was in such pain that the inverviewer offered to break off the interview, but the respondent wished to continue.

TABLE 8-7: REASONS FOR CHARACTERIZING HEALTH STATUS AS WORSE

Reasons	Number
Old age, weaker, tire more easily	13
Mobility limited due to:	
Heart Condition	13
Arthritis, pain	7
Nervous because not well	9
Long term underlying condition worse	6
Hypertension	4
Arthritis, pain, limits use of hands or arms, shoulders	3
Deteriorated to being housebound	1
Temporary: recent surgery, sciatica	2
TOTAL	58 (mentions)

There were 18 who said their health had improved, and these also gave multiple reasons (Table 8-8). Surgery and better control of long standing, underlying conditions such as diabetes and hypertension were mentioned 5 and 4 times respectively. Physical improvement was expressed as being able to do more, or able to get around better. One respondent was no longer bedridden as had happened after leaving CIL. Improved weight was cited four times, and there were six mentions of psychological reasons for feeling in better health.

TABLE 8-8: REASONS FOR CHARACTERIZING HEALTH STATUS AS BETTER

Reasons	Number
Surgery	5
Underlying condition better controlled	4
Physical improvement:	
Get around better	3
Can do more	2
No longer bedridden	1
Weight improved, under control	4
Psychological improvement:	
Feel better, do more, appetite	6
TOTAL	25 (mentions)

VISION STATUS CHANGES SINCE LEAVING CIL

The changes in vision status were more frequent than changes in health status, and much more often in the direction of deterioration. Table 8-9 shows that the changes for 68 respondents were worse, while 11 improved and 42 reported no change. One of those now with worse vision than when leaving CIL had an operation which led to temporary improvement only. This case is included in the category "worse."

TABLE 8-9: CHANGE IN VISION STATUS SINCE LEAVING CIL

Type of Change	Number
No change	42
Worse	68
Better	11
TOTAL	121

Deterioration was not age associated, but improvement occurred more frequently among the older respondents, in fact not a single one of the 26 who were under 60 years of age at referral reported improvement. Without medical data it would be idle speculation to explain this finding. The reasons given for improved vision status are not an adequate basis, since they are laymen's interpretations and are too general.

There is an association between the assessment of changes in health and vision status, since for many, vision is, of course, dependent on their physiological status and systemic changes. Table 8-10 illustrates this relationship. It is important to realize, however, that this is only a partial relationship, and that respondents do distinguish between physical health and vision status. For example, of those who report their vision as worse, about 62 percent say their health is the same or improved.

TABLE 8-10: RELATIONSHIP OF CHANGES IN HEALTH AND VISION STATUS

	Vison Status							
	Total*		Same		Better		Worse	
Health Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Same	65	54.2	27	65.9	3	27.3	35	51.5
Better	18	15.0	6	14.6	5	45.6	7	10.3
Worse	37	30.8	8	19.5	3	27.3	26	38.2
TOTAL**	120	100.0	41	100.0	11	100.0	68	100.0

* One case, don't know Health Status Change, omitted.
** Due to rounding, percentage totals may not add to exactly 100.0%.

Several types of reasons for improved vision were cited. Specifically, surgical intervention was mentioned five times, as were better low-vision aids. Medication was reported twice, improvement in the underlying condition once. Avoiding strain by limiting watching TV was also mentioned. Table 8-11 summarizes these findings.

TABLE 8-11: REASONS FOR IMPROVED VISION STATUS

Reasons	Number
Surgery	5
Low vision aids	5
Medication	2
Avoiding strain	1
Underlying condition improved	1
TOTAL:	14 (mentions)

The 68 respondents with deteriorated vision mentioned a large number of reasons. They did not discuss etiology, but instead described the aspect of their vision that was worse. Table 8-12 presents the distribution of these aspects. The finding that serious deterioration is occurring is of particular significance to CIL's program and definition of objectives. The individuals who have attended CIL, whether successful or not, are continuing to experience changes in health and vision, as well as other aspects of their lives, and the adequacy of CIL's training is not independent of this change during life. This will be discussed more fully in a later section of this report.

The mentions of eye surgery as they occurred, either as direct answers, or in elaborating comments, were analyzed. A total of 19 respondents mentioned such surgery, but one said that though cataracts were the cause of the impairment, surgery was contra-indicated. The other 18 were either making decisions or arrangements for it, had had it so recently that the outcome was as yet unknown, or had undergone it long enough ago to know the outcomes: five had good results, while nine had either no improvement or, in the case of two of these, deterioration of their vision. Table 8-13 shows these findings. It is clear that respondents are not static units, but that, instead, significant changes continue to occur.

TABLE 8-12: ASPECTS OF VISION WHICH HAVE DETERIORATED, MENTIONED BY THOSE REPORTING WORSE VISION SINCE LEAVING CIL

	Mentions	
Aspects of Vision	Number	Percent* (N = 68)
Light Perception		(60.3)
None now	13	19.1
Worse now	27	39.7
Variable now	1	1.5
Seeing Moving Objects		(38.2)
No longer can	10	14.7
Worse now	16	23.5
Peripheral Vison worse	3	25.0
Blurred, hazy, distorted	17	20.6
Can't see as far any longer	14	20.6
Can't read any longer	8	11.8
Totally blind now	2	2.9
One eye totally blind now	3	4.4
Results of surgery	2	2.9
Other miscellaneous	4	5.9
TOTAL:	120	

* Multiple mentions, percents based on 68, total to more than 100.0%.

TABLE 8-13: EXPERIENCE WITH EYE SURGERY SINCE LEAVING CIL

Type of Experience	Number
To be done soon; about to be scheduled	2
Should be done; not yet scheduled	1
Done recently, outcome unknown, as yet	1
Done, outcome good	5
Done, outcome not good	9
TOTAL:	18 (14.9%)

Hearing, of crucial significance to the visually impaired was reported by four respondents as having remained at the level of deterioration present while at CIL. Three said that it was worse since that time, and two said that it had become bad since leaving CIL.

ADDITIONAL TRAINING AND ACQUISITION OF EQUIPMENT

The effectiveness of CIL training not only is mitigated by changes in health and vision status, but further training will also have an impact on performance when tested at the time of the Follow-Up interview. Table 8-14 shows the number of respondents obtaining, or wishing to obtain, such additional training; obtaining, or wishing to obtain, equipment.

O&M training consisted of assistance in becoming familiar with the environment, either because respondents had moved, or because CIL staff could not make a home visit to orient students on returning home when leaving CIL. Three, however, obtained training at a center, having decided that the recommendation of the O&M instructors for additional training was valid.

ADL training was also obtained, partially to be oriented in new environments, or because the skill level attained proved inadequate.

Continuation in Braille or Typing seems to have been obtained as a concommitant of attending centers or agencies for the visually impaired, where it was available to those who apparently used such centers for recreation.

It would seem that the perception of the need for further training is quite limited. In view of the fact that vision is deteriorating for a large proportion of the respondents, this seems a startling finding. This is reinforced further by the finding (discussed below) that many said they did not perform well in skills

TABLE 8-14: ADDITIONAL TRAINING AND EQUIPMENT OBTAINED AFTER LEAVING CIL

	O&M	ADL	BRAILLE		
			Reading	Writing	Typing
Training	Number	Number	Number	Number	Number
Obtained	22 (18.2%)*	10 (8.3%)*	8 (6.6%)*	5 (4.1%)*	6 (5.0%)*
Tried, could not obtain	1	-	2	1	1
Practiced on own	-	-	1	1	1
TOTAL**	23	10	11	7	8

	TBM		Tape Recorder		Typewriter	
Equipment	Number	Percent	Number	Percent	Number	Percent
Obtained	27	22.3	21	17.4	15	12.4
Still waiting, or would like to obtain	1	0.8	4	3.3	1	0.8
Had on leaving CIL	43	35.5	36	29.8	27	22.3
Do not plan to obtain	41	33.9	51	42.1	74	61.2
Broken, given away, returned	9	7.4	8	6.6	3	2.5
No answer	-	-	1	0.8	1	0.8
TOTAL**	121	100.0	121	100.0	121	100.0

* Percents based on 121 respondents.

** Due to rounding, percentage totals may not add to exactly 100.0%.

learnt at CIL because their vision had deteriorated. The concept of obtaining further training when vision gets worse is apparently not familiar to, nor accepted by the graduates.

Equipment was obtained by larger numbers of respondents. In the case of the Talking Book Record Machine, 27 obtained one after having left CIL. One third already had a TBM before, or at leaving CIL, and 41 reported that they had no TBM and would not try to obtain one. A Tape Cassette machine had already been owned by 36 when leaving CIL; 21 had obtained one since then, and 36 did not intend to acquire it. Only 15 acquired a typewriter; 27 already had one at leaving CIL, and 74 did not plan to obtain one.

It would seem that the reality factors related to the acquisition of such equipment could be explored more accurately when at CIL, so that expectations are soundly based and training taken in view of realistic expectations.

OBTAINING OTHER SERVICES FROM AGENCIES FOR THE BLIND

The most frequently utilized such services are social and recreational facilities. Forty-six respondents are using, or used to use, such services. There were 63 who never did so, and two additional respondents who tried it out and did not continue. Three used to attend, but either the service was discontinued, or they moved to an area where none exist. Two additional ones would like such services, but do not have them available. Table 8-15 shows utilization of different services.

Counseling, either individually or in groups, or social work services provided by agencies for the blind, were or are being utilized by about 26 percent. Two respondents had been offered such services but declined them. The majority has not had such services.

Camps for the Blind were attended by 25, while 90 had not done

TABLE 8-15: SERVICES OFFERED BY AGENCIES FOR THE BLIND UTILIZED AFTER LEAVING CIL

Social, Recreation	Number
Regularly go now	29
Occasionally go now	13
Regularly before, occasionaly now	1
Not now, not available	3
Not now, used to regularly	7
Would like to	2
Tried it, did not continue	2
No	63
No answer	1
TOTAL	121

Counseling	Number
Yes	32
Would like	2
Offered, refused	2
No	84
No answer	1
TOTAL	121

Camp	Number
Yes	25
Would like	3
Offered, refused	1
No	90
No Answer	2
TOTAL	121

Paid Work	Number
Yes	5
Being evaluated	1
Would like	2
No	111
No Answer	1
TOTAL	121

so; one respondent had declined such an opportunity, and three would like a chance to go.

Paid work made available through sheltered work-shops, or through agencies for the blind, has been obtained by five respondents and one additional one was in the process of being evaluated for such paid work. Two expressed interest in such work, but the vast majority (111 respondents), said that they had not had such work opportunities. The structure of the question did not reveal whether those who said "no" did not want such work, or could not find it. The age structure and the health status of the group would make it unlikely that many would be searching for such work opportunities.

The respondents seem not to have made a great deal of effort to enter "the world of the blind." In view of Josephson's work[1], this is probably an indication of their ability to continue to maintain a viable life among the sighted. In view of the needs which continue to develop as their sight deteriorates, however, it is legitimate to wonder if assistance, when and if available, could not be utilized without a concommitant change in affiliation. Perhaps CIL could assist by discussing "what to do" when new needs appear.

SELF-EVALUATION OF SKILL LEVELS AT TIME OF FOLLOW-UP INTERVIEW

The respondents were asked to compare the way they could function in nine areas in terms of "before CIL and now." They were asked to express the comparison in terms of "much better, a little better, about the same or worse," and were asked to explain the reasons when they said "worse." A great number, however, explained why they selected whichever choice they made, and a great deal of detail is available.

The nine areas were selected to cover major aspects of living and functioning as a socially integrated independent individual,

Included were:

1. Walking around in your house.
2. Getting around outside.
3. Taking care of yourself, your clothes and grooming.
4. Being able to keep in touch with people by phoning, writing, sending tapes.
5. Being able to handle eating all kinds of foods.
6. Being able to prepare food for yourself.
7. Being able to keep up with things like magazines and books.
8. The way you feel about being with other people
9. The way you can manage your own affairs, bank account, shopping, etc.

The series of questions were not appropriate for every respondent, and two said that they had left CIL too recently to attempt such judgements. For the various items, differing numbers of respondents answered that they had not had instruction in that area. Also, varying numbers said that they had never engaged in the specific activity, and others said that they do not do the activity. In addition, some essentially could not give meaningful answers because of their situation and living arrangements. For the sake of clarity, the results are first presented showing breakdowns by the four degrees of assessment contained in the question asked during the interview, and all other responses are grouped together. Table 8-16 presents this version. Table 8-17 shows the detail of the reasons given for the answer "worse" by the activities.

BEING WITH PEOPLE

It would seem that the question "the way you feel about being with other people," tapped a dimension or area quite different from the others. The largest proportion, about 53 percent reported feeling the same way. Those who gave a non-judgemental answer

TABLE 8-16: JUDGEMENTS ABOUT "BEFORE CIL AND NOW" LEVELS OF SKILLS

	ACTIVITY											
	Indoors		Outdoors		Take Care Of Self		Keep In Touch With People		Handle All Foods		Prepare Foods	
Type Of Judgement	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Much better	42	34.7	45	37.2	34	28.1	39	32.2	26	21.5	28	23.1
Little better	15	12.4	17	14.0	22	18.2	12	9.9	22	18.2	24	19.8
Same	42	34.7	27	22.3	50	41.3	48	39.7	50	41.3	29	24.0
Worse	16	13.2	21	17.4	10	8.3	14	11.6	18	14.9	18	14.9
All Other*	6	5.0	11	9.1	5	4.1	8	6.6	5	4.1	22	18.2
TOTAL**	121	100.0	121	100.0	121	100.0	121	100.0	121	100.0	121	100.0

	ACTIVITY					
	Keep Up With Books, etc.		Feelings About People		Own Affairs, Bank, Shop, etc.	
Type of Judgement	Number	Percent	Number	Percent	Number	Percent
Much better	29	24.0	29	24.0	21	17.4
Little better	8	6.6	5	4.1	13	10.7
Same	40	33.1	64	52.9	38	31.4
Worse	28	23.1	14	11.6	21	17.4
All Other*	16	13.2	9	7.4	28	23.1
TOTAL**	121	100.0	121	100.0	121	100.0

* This category includes "do not do this," "not relevant to present situation," as well as "don't know," "no answer."

** Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 8-17: REASONS FOR SAYING SKILLS "WORSE NOW"

	ACTIVITY					
	Indoors	Outdoors	Take Care Of Self	Keep in Touch With People	Handle Eating All Foods	Prepare Foods
Reasons	Number	Number	Number	Number	Number	Number
Vision Worse	11	10	7	9	11	12
Health Worse	2	3	-	-	3	1
Both Worse	1	2	1	2	2	1
Vision Worse, CIL Helpful	1	1	1	-	1	-
Situational	-	1	-	2	-	2
No Reason Given	1	4	1	1	1	2
TOTAL "Worse"	16	21	10	14	18	18

	ACTIVITY		
	Keep Up With Books, etc.	Feelings About Being With People	Own Affairs Bank, Shop, etc.
Reasons	Number	Number	Number
Vision Worse	21	5	16
Health Worse	-	2	3
Both Worse	-	1	2
Vision Worse, CIL Helpful	-	-	-
Situational	5	1	-
No Reason Given	1	5	-
TOTAL "Worse"	28	14	21

consisted of one who said he never has, and now does not, pay attention to other people, four could not answer the question, two said the CIL experience was too recent to make judgement, one said that this had never been, and was not now, a problem, and finally, one said it was "still the same, but not good."

Vision and health were mentioned by eight who said that they now felt worse about being with others, one reported being ashamed of the apartment and neighborhood. Poorer vision was cited as a burden on others who do the travelling involved in visiting, or feel they must arrange transportation. One felt to be a burden simply because others must help constantly by indicating where things are.

TAKING CARE OF SELF AND ABLE TO HANDLE FOODS

"Taking care of self, clothes and grooming" and "able to handle all kinds of foods" had the same percentage of respondents who saw no change. Reference to Tables 5-2 (ADL Level I) and 5-5 (Grooming, Levels I and II) shows that almost the same percents were able to perform these skills at intake evaluation, and that those who required instruction needed only partial teaching in most cases. Tables 5-9 and 5-12 show the achievements at leaving CIL for these activities. Many students did, in fact, successfully complete these skills, and almost none failed in these areas. It seems realistic to say that change was not perceived. Those who reported a little or a great deal of improvement and specified a reason, almost without exception mentioned skills learnt at CIL. Worse vision and/or health were mentioned by all except one of those who said these activities were worse now (Table 8-17).

KEEPING IN TOUCH WITH PEOPLE

It is more complex to relate the self evaluations for "keeping in touch with people" to incoming capabilities and achievements, since several areas are involved.

Three of the 121 said they do nothing to keep in touch, since they have no one to keep in touch with. All the others answered the question in terms of self-assessment, and presumably are involved and have people with whom they desire to maintain contact.

Many respondents, particularly those living with others, commented throughout the course of the interview that they could count on their spouse, family, or friends to handle the aspects of skills that they could not do, or not do, well: "I type a note and he (husband) addresses the envelope" is an example. Those living alone frequently mentioned that someone, such as a daughter, son, or niece, comes in to help with correspondence. The aspect quite frequently mentioned as an insurmountable problem, by both those living alone and with others, was that they could not read their mail. This was felt to be a deprivation of privacy, which was bitterly resented by some, and considered a barrier to free communication by all who did mention it.

Using the telephone is no problem to any respondent, since even the few who cannot dial adequately can have recourse to the operator, and almost everyone had a telephone available. The exceptions were two in institutions, one in a "hotel" for welfare clients, who had to use pay phones, and another who chose not to have a telephone.

Skills learnt at CIL were mentioned by 18 who said "much better" or "a little better." One who said "same" attributed this to skills learnt at CIL which mitigated deteriorating vision. The reasons for saying "worse" are all in terms of worse vision and/or worse health (Table 8-17).

WALKING AROUND IN THE HOME

About one-third (35 percent) said there had been no change, the same number said they do this much better now, and an additional 12 percent said "a little better." There were no records to show incoming skill levels and achievement for Sensory Development, but a great many of the respondents had returned to, and remained in, the same living quarters. It seems justified to accept this set of judgements as no more biased than others in this series. The reasons given by those who said "worse" were all concerned with deteriorating vision and health. Skills learnt at CIL were mentioned by 14 as reasons to say "much" or "a little" better, as did two who said "same," since their sight and hearing was now worse, but CIL skills mitigate their increased problems.

KEEPING UP WITH MAGAZINES AND BOOKS

This question, again, was potentially concerned with several skills: the TBM, Braille Reading, and also CIL's ability to assist in obtaining the best possible low vision aids. Since this activity involves vision in a most direct way, it had the largest proportion (23 percent) who said "worse." It will be recalled that Table 8-12 showed the changes in vision for 68 respondents (56.2%) whose vision had become worse since leaving CIL. Eight reported they could no longer read, two were now totally blind, and 17 had blurred, hazy or distorted vision. These were now reporting that "keeping in touch" was worse. The skills learnt at CIL were mentioned by 18 of those who said "much" or "a little better," as did one who answered "same." Three additional respondents said that they no longer try to keep up, and one of these attributed this to the fact that it was impossible, since the institution in which he now lives does not assist, in fact hinders, this ability.

Some respondents were quite critical of TBMs. The books available were said to be boring, or the wrong kind, and quite a few said that the bother of ordering and shipping the records was more trouble than it was worth. Several said the ordering and shipping process took much longer than was reasonable. There was adverse criticism of magazines available on records as well. On the other hand, some respondents were delighted with TBM.

The questions concerning Low-Vision Aids were asked only of those whose vision had become worse. Of those 68, 62 answered concerning details about these devices. Fifty had Low-Vision Aids at the time of attending or leaving CIL, and 12 did not. Table 8-18 shows their experiences with Low-Vision Aids since leaving CIL.

TABLE 8-18: EXPERIENCE WITH LOW VISION AIDS (LVA) SINCE LEAVING CIL FOR THOSE WITH WORSE VISION

LVA Status	Number
Had LVA at CIL	
Still alright	16
Needed & made change	11
No longer of any use	5
Still using wrong LVA correct one never sent	1
Need change, can't afford it	1
No answer	1
TOTAL:	50
No LVA at CIL	
Obtained since	8
Still have none	4
TOTAL:	12

Not everyone has the correct or best LVA, and a great deal of continuing change is needed in this area to obtain optimal benefits.

It will also be remembered that relatively few students achieved

Braille Reading Level III (Table 5-10) by the time they left CIL and that on the follow-up test (Table 7-2), very few, indeed, could still read at the skill level that they had learnt. By actual test, four could still read at Level III, and five interviewed by telephone said they could read well at this level. The actual test allowed five minutes for a very short test, and only two read well, correctly and fast. It would seem that Braille Reading does not contribute any significant amount to the skills used in "keeping in touch." One interesting exception is the respondent who enrolled in a university program and uses Braille for taking notes during lectures, and Braille texts for study.

Those former students who are intellectually active, and want to keep up with their own professions, expressed great frustration. Others who are interested in more general reading material had fewer problems. It is difficult to determine how much reading respondents actually did before their vision became a problem, and what they have "settled" for, in view of their impairment.

MANAGING ONE'S AFFAIRS

About 31 percent said there had been no change, but fewer said they could handle their affairs "much" or "a little" better; there were about 28 who said this. About 17 percent said "worse," and almost one quarter gave other answers. Of the 28 who gave other answers, 20 reported that they no longer attempted to do things like shopping or banking, but leave it to spouses, children, other relatives, friends, and paid help. Among these are individuals who had learnt independent outdoor travel and/or check writing. As mentioned before, independent travel was given up because respondents had moved and not been familiarized with the new neighborhood, were afraid of their neighborhood, or had worse vision and could not manage any longer, since the skills learnt were relevant to the vision status during training.

Some had no "need" to manage since others were not only willing to do for them, but always had done so.

Table 8-17 shows that those who said "worse" all cited deteriorated vision and/or health.

GETTING AROUND OUTDOORS

Unlike the experiences with managing their own affairs, the reports indicate a shift towards doing this "much" or "a little" better, with almost 51 percent saying so. About 17 percent said it was worse. Table 8-17 shows that vision and health are most frequently mentioned. Skills learnt at CIL were mentioned by 21 who said "much" or "a little" better. The phrasing of the question does not limit the respondents to answering in terms of independent travel, and therefore, data about O&M are not comparable to these responses. Two of the respondents classified as "all others" said that they no longer go outdoors, and two additional ones, who are institutionalized, said they were not permitted to go outdoors. Another two could not make the comparison because they now have seeing eye dogs, and finally there were two who had received training for future deterioration of vision, and one who said "don't know."

PREPARE FOOD FOR SELF

Only about one quarter said this had not changed (24.0%), and interestingly enough, not much difference was found in the proportion who said "much" and "a little" better. Undoubtedly, the distribution of answers is influenced by the large proportion in "all other" answers. Eight of the 22 no longer prepare food for themselves, and eight additional ones are not permitted to do so. This includes people living in institutions which let other inmates do limited cooking, but not "the blind," some residential hotels and

Sheltered Housing which prohibit cooking for everyone, and one respondent whose wife does not permit him to do so, even though he learnt the skills at CIL. One other respondent has no cooking facilities, though he neither lives in special housing nor an institution.

Those who said "worse" (Table 8-17) cited worse vision and/or health, and two said that the facilities are difficult for them to handle. CIL skills were mentioned by 13 who said "much" or "a little" better, and by one who said "same."

The outcome of the tests at the Follow-Up interview indicated that while many respondents could make coffee successfully, many did not follow CIL safety methods (Table 7-1). This aspect can not be ascertained for the telephone interviews, of course. The self assessment of "better" appears to be independent of concepts of safety.

SOCIAL ACTIVITIES

Questions 5 and 6 asked about visitors and going out, so that some insight into the social network for CIL "graduates" might be gained; what sort of lives they lead after leaving. Table 8-19 shows the frequencies reported for going out of the home.

TABLE 8-19: FREQUENCY OF GOING OUT OF HOME

Frequency	Number	Percent
Several times daily	43	35.5
Once daily	34	28.1
Several times a week	30	24.8
Once a week	3	2.5
Every couple of weeks	4	3.3
Once a month	3	2.5
Other	4	3.3
TOTAL*	121	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

Since this information came from spontaneous answers and not a checklist, there is an unknown amount of under-reporting. Nevertheless, it can be seen that over 60 percent report going out once a day or several times a day. An additional quarter go out several times a week, and 11 said they go out less frequently. The four "other" answers consist of statements such as "depends on the weather," "depends on my arthritis," "depends on when I'm taken." The institutionalized are not "housebound" and can go out, but several have restrictions placed on this which are designed to protect their safety, though apparently no account is taken of skills learnt at CIL.

Age is not a factor in frequency of going out , except for the finding that there is a tendency for the other respondents to go out less frequently; neither is "living alone." Self-reported health status and changes in vision status are also not related to frequency of going out. Sex, however, is associated, with proportionately more men going out several times a day, or daily, than women.

The activities that bring the respondents out cover the range of all conceivable types of activities (Table 8-20). Significantly of interest are 14 respondents who have scheduled activities such as full-time jobs, full-time courses at college, work in a sheltered shop, enrollment in courses, or doing volunteer work on a scheduled basis. One of these reports doing occasional work, when it is available, which requires scheduled responsible execution when it occurs. Thus almost 12 percent are leading lives which demand performance without regard to their degree of handicap.

The three who go out only about once a month, the extreme opposite behaviour, consist of one who lives alone and expressed pride in having organized everything so that a monthly trip "out" is all that's needed, and there was no complaint or regret. The other two live wtih spouses, and felt there was no reason to go out. They also did not express any feeling of deprivation or limitation.

In fact, the only individuals who conveyed the impression of

TABLE 8-20: PURPOSES FOR GOING OUT

Purpose	Number*	Percent**
Shop	82	67.8
Bank	46	38.0
Doctor's Office, Clinic	33	27.3
Church	31	25.6
Beauty Parlor, Barber Shop	4	3.3
Visit People	57	47.1
Social Club, Center, Organization	56	46.3
Participant in Sports	7	5.8
Spectator at Sports	4	3.3
Movies, Theatre, Concerts, Lectures	6	5.0
Go Out With Others	12	9.9
Restaurants, Bars	10	8.3
Mentioned 4 or More of the Above	11	9.1
Go for Walks, Unrestricted	28	23.1
Go for Walks, Restricted	9	7.4
Walk the Dog	3	2.5
Go on Trips	1	0.8
Work, Regular Activities:		
Full-Time Job	3	2.5
Full-Time College	2	1.7
Volunteer Work	6	5.0
Attend Courses	3	2.5
Occasional Work	1	0.8
Sheltered Work-Shop	2	1.7

* Multiple Answers

** Percentages based on 121 respondents.

feeling limited were the 12 who said they went out whenever others arranged this for them, and then they essentially conformed to whatever these others planned for them. Nine said they go for walks to get air, exercise and "a change," but restrict themselves to walking around the block without crossing any intersections. Many more, 28, go out for walks but are not restricted in the same way.

VISITORS

Respondents indicated the frequency of visitors and who these visitors were. Frequency is shown in Table 8-21.

TABLE 8-21: FREQUENCY OF VISITORS

Frequency	Number
Daily	16
More than once a week	45
Once a week	14
Every couple of weeks	18
Once a month	5
Other	10
Nobody	10
Visitors are for other household members	3
TOTAL:	121

Those who have visitors infrequently made an explanatory comment much as, "my son lives in ---- and they (son's family) come about every month or six weeks." Others said that they do the travelling part of the time, indicating that they have more frequent contact than indicated by their answer. Some spend long periods when away visiting. Several, however, actually are limited to infrequent contact consisting of people visiting them.

Several of the 10 who said "nobody" qualified this answer by saying that they are too busy and have no visitors by their own choice, that they do the visiting. One said he wanted no visits and did not wish to go visit anyone. Another said everyone else was also "old and decrepit," and it was too difficult for anyone to visit anyone else, and only upsetting. Two of the 10 live in institutions and have no visitors.

The three who reported visitors, but then nullified this by saying that the visitors were not for them, also indicated in other answers that they were not integral parts of the households in which they live, even though each has a spouse.

Visitors consisted of relatives, friends, and neighbors, and there were only a few mentions of ministers, physicans and nurses, social workers, and others. Table 8-22 shows the frequency with which each type of visitor was mentioned. "Other" includes students who come to the house for instruction, and landladies who are not as close as friends and neighbors.

TABLE 8-22: FREQUENCY OF TYPES OF VISITORS

(Multiple Answers)

Type of Visitor	Number	Percent*
Sons and daughters	34	28.1
Other relatives	63	52.1
Friends	75	62.0
Neighbors	35	28.9
Minister	8	6.6
Social worker	3	2.5
Physician, nurse	2	1.7
All others	8	6.6

* Percents based on 121 respondents

"Sons" and "daughters" frequently means the entire family including grandchildren. "Other relatives" include siblings, nieces and nephews, cousins and grown-up grandchildren coming on their own. The relatively infrequent mention of sons and daughters is apparently due to the geographic dispersal of these children.

There is no association between living alone and frequency of visitors, the frequency of visitors is the same for them and those living in households that include others. Only the three living with "unrelated others" report less visiting, but the numbers are too small to reach general conclusions.

Women receive daily visits much more frequently than men. However, age, length of blindness, self-perception as blind, health and vision status changes are not associated with frequency of having visitors.

Cross tabulations of frequency of going out and having visitors show that those who go out only about once a month or less frequently, all have visitors at least every couple of weeks, and most of them more frequently. Only the institutionalized, who go out infrequently, have no visitors. The respondents, therefore, are not isolated and immured individuals.

SELF PERCEPTION AND ATTITUDES ABOUT BLINDNESS

The home interview administered during the screening process contains two questions which were repeated in the Follow-Up interview. One is a question about self-perception as blind or not. The second is a series of questions about perception of the status of blind persons. This series was repeated

The questions ask for degree of agreement or disagreement concerning the status and role of blind persons in terms of social isolation, dependence and limitations. The scoring utilized was such, that a low score indicates a view of the blind which is defeatist and negative, while a high score indicates the attitude that the blind are treated, and can function, as well as the sighted. The minimum score possible is 10 and the maximum is 50. The respondents generally did not recognize the set of questions at the time of the Follow-Up interview. The few who did, or who commented, only recognized the similarity of the battery; none tried or could recall previous answers.

Table 8-23 shows the scores before and after attending CIL for respondents.

TABLE 8-23: DISTRIBUTION OF ATTITUDE SCORES BEFORE AND AFTER ATTENDING CIL

Score	Home Interview Number	Home Interview Percent	Follow-Up Interview Number	Follow-Up Interview Percent
10 - 19	1	1.0	-	-
20 - 29	25	24.0	32	27.1
30 - 39	45	43.3	45	38.1
40 - 49	33	31.7	38	32.2
50	-	-	3	2.5
Sub-Total*	104	100.0	118	100.0
No Score	17		3	
TOTAL*	121	100.0	121	100.0
Mean	34.4		36.2	

* Due to rounding, percentage totals may not add to exactly 100.0%.

There appears no significant change; the distributions and means are very similar. Changes, however, did occur, but they are obscured since the "turn-over" is not visible. Table 8-24 will display the details of "turn-over" for the individual respondents. It can be seen that considerable change occurred, and that a large proportion of those with scores of 20-29, before attending, expressed attitudes at the Follow-Up interview which indicate a "better" attitude, while those who had high scores, above 40, tended to answer less optimistically. Those with middle range scores, 30-39, shifted almost equally into higher or lower scores. The result,

TABLE 8-24: CHANGES IN ATTITUDE SCORES BEFORE AND AFTER ATTENDING CIL

Direction & Amount of Change	SCORE BEFORE ATTENDING CIL									
	Total[*]		10 - 19		20 - 29		30 - 39		40 - 49	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Increase	(52)	(50.0)	(1)	(100.0)	(16)	(64.0)	(22)	(48.8)	(13)	(39.4)
1 - 4	26	25.0	1	100.0	6	24.0	10	22.2	9	27.3
5 - 9	19	18.3	-	-	5	20.0	10	22.2	4	12.1
10 or More	7	6.7	-	-	5	20.0	2	4.4	-	-
Decrease	(42)	(40.4)	(-)	(-)	(6)	(24.0)	(18)	(40.0)	(18)	(54.5)
1 - 4	25	24.0	1	-	4	16.0	11	24.4	10	30.3
5 - 9	10	9.6	-	-	2	8.0	4	8.9	4	12.1
10 or More	7	6.7	-	-	-	-	3	6.7	4	12.1
No Change	10	9.6	-	-	3	12.0	5	11.1	2	6.1
TOTAL[**]	104	100.0	1	100.0	25	100.0	45	100.0	33	100.0

[*] Includes only those with both scores.

[**] Due to rounding, percentage totals may not add to exactly 100.0%.

almost no shift in mean scores, perhaps indicates that those who were least optimistic about the life of "the blind" improved their outlook, while those anticipating little trouble became more "realistic." Very few, about 10 percent, did not change at all, which, in itself, indicates the capacity of men and women to continue to change.

There were some changes in self-perception as blind, but almost three-quarters (72.8%) did not change. Two-thirds of those who remained stable thought of themselves as blind, and one-third did not do so either before or after attending CIL (Table 8-25). The remaining, which consisted of 28 individuals, showed changes to "blind" for 15, to "not blind" for seven, to "partially blind" for four, and finally, to "don't know" for two

Interestingly enough, there appears to be little relation between self-perception changes and attitude changes, as the data in Table 8-25 shows. Those who had no change in self-perception showed essentially the same distribution in types of changes of attitudes, and for the others, since there were so few cases, the differences between those changing to "blind" and "not blind," though apparently large, are not significant.

It would seem then, that CIL had some impact on the way these respondents feel about blindness. Further support for this comes from spontaneous comments about the impact CIL had on them. Throughout the interview, whenever a respondent mentioned or discussed "independence," it was coded. These mentions occurred for 69 respondents, and only three said that there had been a loss of self-confidence since leaving CIL. One of these described a steady decrease as physical health and vision continued to deteriorate. Two said that at CIL they had gained a great deal of self-confidence, but had lost it since then because their failing vision and health provided so many obstacles and difficulties. There were 40 who said that they had self-confidence and that, while this had not increased

TABLE 8-25: CHANGE IN ATTITUDE SCORES AND CHANGE IN SELF-PERCEPTION AS BLIND BEFORE AND AFTER ATTENDING CIL

	CHANGE IN SELF-PERCEPTION													
	Total*		Blind Before & After		Change To Blind		Not Blind Before & After		Change To Not Blind		Change To Partially Blind		Change To Don't Know	
Change In Attitude Score	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No Change	10	9.7	5	10.0	1	6.7	3	12.0	-	-	1	25.0	-	-
Increase	52	50.5	26	52.0	7	46.7	14	56.0	4	57.1	1	25.0	-	-
Decrease	41	39.8	19	38.0	7	46.7	8	32.0	3	42.9	2	50.0	2	100.0
TOTAL**	103	100.0	50	100.0	15	100.0	25	100.0	7	100.0	4	100.0	2	100.0

*Includes only those with answers to both sets of questions.

**Due to rounding, percentage totals may not add to exactly 100.0%.

because of attending CIL, it had been maintained despite the continuously mounting difficulties, frustrations and limitations in their lives. Finally, 16 said they had a greater feeling of independence or confidence and attributed it to their attendance at CIL. The comments themselves frequently express another dimension: "coming to terms with reality," and being aware that this is beneficial. "I faced it, and for the first time accepted my need to use special ways of handling things - I admit that I am blind and limited, and I don't do dangerous things anymore. I was so busy hiding it from myself and everyone, that I hid. I don't do that anymore, and I feel now I can continue working 'til I reach retirement;" "They turned my head around and I feel I don't have to change my whole life;" "Seeing all those others made me feel better and I started to learn...we're in touch and we're doing alright (other fellow students);" "They (the staff) are blind too and I saw how well they did and they're young;" "being there changed my attitude, they were concerned and so patient, I felt I could learn and manage."

It is significant to note how frequently the attitude of the staff is mentioned as the aspect that seems to have been crucial. These older persons found that young and younger-than-themselves persons behaved in a manner that conveyed clearly that teaching "them" was a normal, acceptable occupation, done with a professional attitude as a serious, worthwhile life work. The students either regained their self-esteem or had it strengthened, and were thus able to "go out and cope." Two, in fact, left their spouses and now live alone; their marriages were "bad" and the visual impairment had made them and their spouses feel that they were bound in intolerable dependency.

Not everyone volunteered comments about this aspect of learning of course. Respondents varied considerably in their ability to verbalize, and there was no direct, structured question about independence. The reason for this deliberate omission is that "satisfaction with services" questions usually elicit a great deal of "lip service" and spontaneous comment, though not subject to systematic analysis, tends to reveal attitudes or opinions which are firmly held by respondents independent of suggestions by means of structured questions.

REFERENCE - CHAPTER EIGHT

1. Josephson, E.: The Social Life of Blind People, 1968, New York, The American Foundation for the Blind.

CHAPTER NINE

RESPONDENTS' VIEWS OF CIL

EXPECTATIONS

Question 9 asked respondents if the Center had been "pretty much like you expected it to be" or quite different, and if different, how it had been different. Table 9-1 shows the responses.

TABLE 9-1: EXPECTATIONS ABOUT CIL AND EXPERIENCE

Responses	Students Number	Students Percent
As expected	22	18.2
Different	(47)	(38.8)
Better	29	24.0
Worse	8	6.6
Other	10	8.3
Did not know what to expect	45	37.2
Was frightened	2	2.7
Don't know, no answer	5	4.1
TOTAL:	121	100.0

*Due to rounding, percentage totals may not add to exactly 100.0%.

The only factor significantly associated with the distribution of responses is sex: women less often said "as expected" and "better;" they constituted 80 percent of those who said "worse." Both respondents who said they were frightened at the thought of going to CIL were women. Equal proportions of men and women said they did not know what to expect.

Those who said "different in a worse way" expressed dissatisfaction with the curriculum or the length the program took, but hastened to say they liked it, the staff, that CIL was doing the best it could, etc. Those who said "different" and are not classified as "other" did not express value judgements but mentioned a single aspect: "it was real school, I thought we'd have more of a recreational program," for example.

Age, education, length of visual impairment, living alone or with others, current health and vision status, other answers indicating liking or being satisfied with CIL, none of these characteristics were associated significantly. Those who said they were in poor health at the intake home interview contained more, proportionately, who said "different-better." The completion rate (percent of skills learnt of those needed and wanted) was not associated, nor was the ratio of tests "passed" to total tests taken at the follow-up interview. Interestingly enough, none of those who said they did not like CIL (question 10, below) said it was "different-worse." Equally, those who expressed the opinion that they were not satisfied with the CIL experience (question 10) did not say they found it "different-worse."

It seems that only about 20 percent had any realistic concept about CIL and what it would be like to attend. The students appear a rather self-selected group who had the enterprise to try something, though not possessing a structure for it, or facing something not too pleasant in their anticipation. It must be borne in mind that attending CIL does not follow "naturally" as a phase in treatment and rehabilitation as it occurs after hip surgery or stroke, for example.

PROGRAM ELEMENTS

Instruction:

Question 10 was an unstructured question asking respondents what they liked, and then what they "did not like so well - even little things." The individuals' education, the ability to express themselves, their mental alertness all played a large part in their ability to respond. One respondent said that it was some time since she had attended CIL and she was old, got confused, and really could not remember anything about the place. From this extreme, answers ranged all the way to an extremely well-organized, objective discussion of society's role and function _vis à vis_ the elderly, and the handicapped elderly, in particular, with specific relevant reference to CIL. Much of the material obtained could be analyzed in terms of responses relating to specific courses or subjects. One dimension was the enjoyment or agony of taking specific subjects, another their utility, a third how well they had been taught. Table 9-2 shows the responses in terms of frequency of mentions by subject.

TABLE 9-2: FREQUENCY OF MENTIONS OF SPECIFIC SUBJECTS

Subject	Number*	Percent**
O&M	50	41.3
Braille	50	41.3
ADL	40	33.1
Typing	31	25.6
Sensory Development	26	21.5
Braille Aids	16	13.2
Electronic Devices	12	9.9
Grooming	12	9.9
Sewing	11	9.1
Script	10	8.3
All others	18	14.8

* Multiple answers

** Percents based on 121 respondents

Table 9-3 displays the frequency of positive, mixed and negative mentions among the answers shown in Table 9-2. Positive answers include statements such as: "I liked it" or, "it was useful," "it was well taught." Mixed answers include statements such as: "I didn't like it, but it was useful," "I liked it but there wasn't enough time for it." Negative answers include: "not worthwhile," "not well taught," and, "didn't like it."

It is clear that favorable mentions far outrank both mixed and negative comments, except for Braille and Grooming. For these two, positive comments are less than the two thirds, or more, for all the others listed.

TABLE 9-3: COMMENTS ON INDIVIDUAL SUBJECTS

			Type of Comment					
	Total		Positive		Mixed		Negative	
Subjects	Number	Percent	Number	Percent	Number	Percent	Number	Percent
O&M	50	100.0	48	96.0	-	-	2	4.0
Braille	50	100.0	29	58.0	6	12.0	15	30.0
ADL	40	100.0	27	67.5	6	15.0	7	17.5
Typing	31	100.0	25	80.6	1	3.2	5	16.2
Sensory Development	26	100.0	21	80.8	4	15.4	1	3.8
Braille Aids	16	100.0	15	93.7	-	-	1	6.3
Electronic Devices	12	100.0	12	100.0	-	-	-	-
Grooming	12	100.0	6	50.0	3	25.0	3	25.0
Sewing	11	100.0	7	63.6	2	18.2	2	18.2
Script	10	100.0	9	90.0	-	-	1	10.0
All Others	18	100.0	16	88.9	2	11.1	-	-

Braille was considered difficult, frustrating, and not useful at home. Some considered it badly taught because the classes had too many students in them. Those who made positive statements rarely commented on utility, but said they had "liked" it. The comments on Grooming are not numerous enough to interpret with certainty. Individuals who made mixed or negative comments concentrated on the "care of self" part of the subject.

"I was never interested in 'beauty' in all my life and couldn't see why I should start now," is an example of this sort of comment.

It is interesting to see that so many favorable mentions of Braille and Typing occurred despite the frequency of giving up these subjects. Perhaps the fact that a relatively large part of instruction time was devoted to them, as well as practice, made these two subjects memorable.

Many respondents made general statements at the beginning of their answer to Question 10, and these tabulations are shown in Table 9-4. Of special interest are the nine respondents who made negative comments. Four of these felt that CIL was the wrong place for them, but it is important to note, only two of them left before completing the program with a reasonable completion rate. Their expectations were: "I thought I'd be trained for work and getting a job," "I'm no good at what they teach. I wanted to learn to work with tools, machinery," "I thought we'd learn hobbies, play cards and do a lot of things like that," "I thought they'd show us New York, take us to concerts, things like that."

There was one other individual who made a series of non-committal comments and answered "don't know" frequently in response to previous questions, who finally said that CIL was not paying enough attention to Blacks. On probing it appeared that this respondent felt that not enough Blacks were at CIL, and that CIL was not trying hard enough to make itself available to Blacks. This respondent, who was Black, did not, however, offer any specific comments on the subjects taught, or any other aspects of being at CIL. Reference to the ethnic/racial characteristics of the total referred population, and the relevant discussion, will recall that CIL has a proportion of Black referrals which is commensurate with the racial composition of the population in the area served.

Three complained about having had too much free time. This complaint was in relation to time for instruction, specifically.

TABLE 9-4: COMMENTS OF OVERALL JUDGEMENTS

Comments	Number	Percent
Favorable		
All subjects useful	56	75.7
Some useful, some not	3	4.1
All well taught	3	4.1
(Sub-Total)	(62)	(83.9)
Unfavorable		
OK for others, not me	1	1.4
Wrong idea, nothing of value for me there	3	4.1
Too much free time	3	4.1
Liked nothing taught	2	2.7
(Sub-Total)	(9)	(10.9)
Can't say, not there long enough	2	2.7
Can't remember	1	1.4
No general comment	47	38.8
TOTAL*	121	100.0

[*] Due to rounding, percentage totals may not add to exactly 100.0%.

Many more complaints were made about the free times during the evenings, and these will be discussed below. The data concerning average periods of instruction per week (Table 6-6) seems to provide ample grounds that this complaint is reasonable, and it is astonishing that there was not more comment about this aspect of the program. Since the finding about the small average number of periods of instruction was entirely unanticipated, the questionnaire did not contain questions or probes about this aspect, and there is no way to answer questions such as: was the amount of instruction per week comfortable for this particular population, or was it too light, but accepted uncritically?

OTHER PROGRAM ELEMENTS AND LIVING ARRANGEMENTS

Question 11, also unstructured, asked for suggestions that would make CIL "better and more helpful to people." After volunteered responses were recorded, probes were used in case six aspects of interest had not been mentioned spontaneously. These were:

1. Food
2. Living quarters
3. Choice of things to learn
4. Other students
5. Way staff dealt with students
6. Intake process

Spontaneous comments and answers, obtained by probing, were analyzed together. Table 9-5 shows the opinions expressed in order of frequency of mentions. The respondents, with few exceptions, spoke of the staff in terms which must be described as glowing. The interest, patience, dedication and warmth of the staff was mentioned most usually, and also, frequently mentioned, was the pleasure found in being exposed to a young staff, particularly a well-trained young staff with the ability to work with old or mature persons. Of two who said they disliked the staff, one felt that the

TABLE 9-5: SPECIFIC ASPECTS OF CIL PROGRAM AND TYPES OF COMMENTS

	COMMENTS**						
	Total		Liked		Did Not Like		Mixed + Other
Aspect of Program	Number	Per-* cent	Number	Percent	Number	Percent	Number
Staff	110	90.9	108	98.2	2	1.8	-
Choice of Subjects	95	78.5	76	80.0	11	11.6	7
Psychologist	33	27.3	23	69.7	9	27.3	1
Intake Thoroughness	33	27.3	28	84.8	4	12.1	1
Group Sessions	29	24.0	23	79.3	3	10.3	3
Social Worker	22	18.2	18	81.8	3	13.6	1
Medical Care	16	13.2	11	68.8	3	18.7	1
Intake Strain	15	12.4	6	40.0	5	33.3	4
Size of Classes	10	8.3	2	20.0	8	80.0	-
Medical Eye Care	8	6.6	3	37.5	2	25.0	3
Hearing Care	8	6.6	6	75.0	1	12.5	1
Intake Time	7	5.8	5	71.4	1	14.3	1
Transportation	7	5.8	5	71.4	2	28.6	-
Treated as Child	4	3.3	2	50.0	2	50.0	-
Pushed to Take Subject	1	0.8	1	100.0	-	-	-

[*] Percent of 121 respondents who mentioned specific aspect.

[**] Percents based on number of total comments for specific aspect.

staff had favorites and had neglected others, while the other respondent felt that the staff had no perception of the problems faced by the elderly blind, and was stupidly optimistic.

Some of the individuals who did not care for the choice of subjects offered, also were those who felt CIL was not the right place for them; they had either expected training that would equip them for jobs, and wanted manual training, or else had hoped for leisure time activities such as knitting or games. Those who had "mixed" comments approved generally, but had some reservations about the applicability of some skills.

The intake evaluation process was mentioned both in terms of thoroughness and strain which this week had been for some. The thoroughness was approved of by 33, but five others did not approve, or felt it was not necessary for them. Those who commented on the strain of this "diagnostic assessment week" fell into two groups; six who approved despite the strain, and nine who felt it was too much for them to handle, since they had become anxious about "passing" and being accepted, could not see why their intelligence had to be tested, and so forth.

The medical care and ophthalmological examination and care were commented upon favorably by those who had what they considered "good" care, and was judged unfavorably by those who were either disappointed by the results or felt that they were exposed to superficial incompetent care. One respondent felt the medical evaluations were an imposition since he had private care and did not want unknown physicians to examine him.

The class sizes for Braille and Typing were objected to by most of those who mentioned this aspect; these respondents would have preferred individual sessions because they felt that they did not obtain the same attention as some others in these sessions.

All the students had meals at the dining room, where they were seated by the dining room staff. Persons with special diets were grouped together, and lingering over meals was discouraged. Almost 93 percent (Table 9-6) commented on the food or the service, with almost two-thirds giving a favorable response. These respondents felt the servings were generous or adequate, the menu good for an institutional setting, and the food plain but wholesome and well-prepared. A further 11 percent said much the same, but qualified their approval so that it was characterized as merely "alright", or "O.K.". About six percent had mixed feelings, saying that some days food was alright, but not on other days; that "they did the best they could." There were 14 percent who disliked the food itself or the setting. They said that the food was fattening, that the personnel was dictatorial, arbitrary seating spoiled the social aspects of mealtime, that meals were rushed and not an occasion for relaxing. A final three percent limited themselves to making suggestions, but gave no opinion.

Those who had lived at CIL talked about their room. Almost two-thirds (65%) approved of the rooms. They felt they were clean,

TABLE 9-6: SPECIFIC ASPECTS OF PARTICIPATION IN CIL AND COMMENTS

	TYPE OF COMMENT*												
	Total**		Liked		Allright		Mixed		Disliked		Suggestion Only		Other
Aspect	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Food	112	92.6	74	66.1	12	10.7	7	6.2	16	14.3	3	2.7	-
Room	77	90.6[a]	50	65.0	6	7.8	3	3.9	15	19.5	3	3.9	-
Roommate	36	42.4[a]	12	33.3	1	2.8	1	2.8	5	13.9	11	30.6	6[c]
Recreation	39	45.9[a]	9	23.1	4	10.3	2	5.1	24	61.6	-	-	-
Supervision & Safety	17	14.0	6	35.3	-	-	-	-	10	58.8	1	5.9	-
Other Students	47	38.8	38	80.9	1	2.1	2	4.3	5	10.6	-	-	1[d]
Institutional	20	16.5	11	55.0	2[b]	10.0	1	5.0	6	30.0	-	-	-
Helped Overcome Depression	15	12.4	15	100.0	-	-	-	-	-	-	-	-	-
Attitude Towards Blindness	43	35.5	40	93.0	-	-	-	-	2	4.7	-	-	1[d]
Attitude Towards Old Age	3	2.5	2	66.7	-	-	-	-	1	33.3	-	-	-

* Percentages based on total number of comments for specific aspect.

** Based on total of 121 respondents

[a] Percentage based on 84 residential students.

[b] Comments such as, "run like a school, I liked that."

[c] All comments were: "No privacy."

[d] Comments were: "Can't decide."

adequately furnished, the best CIL could do in view of costs, resources, and an institutional setting. A further eight percent merely said the rooms were alright, and about four percent had mixed feelings. These latter respondents said that, while the rooms were clean, they were not too comfortable; not equipped with enough chairs or facilities for study. Almost 20 percent disliked their rooms, characterizing them as unacceptable since the beds were uncomfortable, the shades did not work or were missing, blankets were inadequate, there were no chairs one could sit in comfortably, the room was too small to accomodate the roommates. A final 4 percent limited themselves to suggestions rather than evaluations.

One-quarter commented on the experience of having had a roommate. Forty percent approved of their roommates or the idea of having a roommate. Only six persons reported that they objected to sharing a room because they had no privacy. About seven percent either said it was alright to have a roommate or had mixed feelings about it, while almost 17 percent disliked the idea of a roommate. The dislike was based either on an objection to the specific roommate, ranging from strong objections to that roommate's behaviour to a lack of things in common. The almost 37 percent who limited themselves to comments only mentioned two aspects equally frequently: difficulty of dealing with a roommate when not used to this style of living, and specific selection of roommate with whom they had little or nothing in common.

Recreation was a problem for a large proportion of almost the third who mentioned it. Over 60 percent of these reported that there was almost nothing to do, that they were left to their own inadequate devices in the evenings, and that promises for escorts to church services were not kept. Ten percent felt that "they were doing the best they could," and another five percent felt that what was offered was not what they would have preferred. Those who were satisfied spoke about social relationships with specific staff members, and this comprised almost 25 percent of those who made any comment about recreation.

Attention to personal safety was favorably mentioned by six respondents, while 10 expressed the feeling that their safety had been in jeopardy. These were persons who reported either having had an accident or mishaps with elevators, staircases, corridors, or not having any response to bells during the night. One person made a suggestion about orienting new students to the toilet facilities.

Attitudes towards fellow-students were expressed by almost 39 percent. Of these, almost 81 percent said they liked their fellow-students, found them compatible, interesting or enjoyable. One person said "they were O.K." (2.1%) and one could not decide what he thought about the fellow-students, while two had mixed feelings; liking some and not others. Five, or 11 percent, disliked their fellow-students, and two of these left CIL because of this.

The institutional aspect of CIL was mentioned by about 17 percent. Of these 55 percent said that they were pleasantly surprised that CIL was not run like an institution, but that people were treated as individuals; 10 percent said CIL was run like a school, and they liked this since it gave them the feeling of purpose and goals to be achieved. A further 30 percent disliked the institutional aspect, either because it was like being in an institution like a home or hospital, or because it was run like a school. One further person said that during the evaluation week CIL felt like a prison, but that the period of instruction was "O.K."

The CIL atmosphere was helpful to 15 respondents who said it assisted them to overcome their feelings of depression. Many respondents (39) reported that CIL was most helpful in changing attitudes towards being visually disabled. This was due to either seeing other students coping, the visually handicapped staff members functioning well, or the attitude of all the staff which was seen as constructive and supportive. As one respondent said, "being there helped turn my head around about being blind." Only one respondent disliked CIL's attitude about blindness and said that the staff was unrealistic about the true limitations blindness imposes. One other respondent disliked being with other visually handicapped and felt it would be better not to associate with them at all. Finally, one respondent reported having had an improved attitude toward being blind, but that further deterioration in vision has cancelled out this gain.

Interestingly enough, only two persons commented that the CIL experience helped them face the problem of aging,while one respondent felt that CIL does not deal with this aspect at all.

In summary, it might be said that the CIL students coped remarkably well with the potential problems of attending the program. They were able to accept a residential program despite their normal life style and their age. They were quite realistic about the capacity of CIL to provide comfort or extras, and only a very few found the CIL setting intolerable, or unnecessarily difficult, or badly run.

In view of the diversity of the student population, it seems remarkable how much agreement there is about CIL, the staff seems able to establish good relationships with most of the students, and the array of services offered seems acceptable or well justified.

CHAPTER TEN

BENEFITS OF ATTENDING CIL

CIL has been designed to assist the elderly who have become visually impaired in late middle age or thereafter, in order to equip them with skills which will enable them to continue as free living members of society, able to continue in the life-style they have constructed for themselves. Prevention of institutionalization and minimizing expenditures for assistance are specific objectives. The questionnaire contained three questions designed to elicit data concerning these objectives.

CONSIDERATION OF MAKING CHANGES IN LIVING ARRANGEMENTS BECAUSE OF VISION IMPAIRMENT BEFORE ATTENDING CIL

Question 13 asked respondents if they had considered such a change, how seriously they had done so, and what type of change they had in mind. Tables 10-1 and 10-2 present the data. Over 60 percent did not report such considerations; about eight percent could not answer or were not asked the question. Almost 30 percent said that they had considered a change and some of these (seven persons) reported that they had already made such a change. The kinds of changes envisaged or implemented were diverse, but almost half (48.6%) were thinking in terms of old age or nursing homes. Two of these 17 individuals actually were institutionalized persons, two had not considered any changes before attending CIL, and the other two were already living in institutions.

The 28 who had thought about a change but had not implemented it before coming to CIL, were asked whether they still were thinking

TABLE 10-1: CONSIDERATIONS OF CHANGE IN LIVING ARRANGEMENTS DUE TO VISION IMPAIRMENT, BEFORE COMING TO CIL

Type of Consideration	Respondents Number	Percent
Yes, thought about it	20	16.5
Yes, worried vaguely, unspecifically	4	3.3
Yes, when totally blind	2	1.6
Yes, someone else suggested	2	1.6
Yes, already made change	7	5.8
YES: (Sub Total)	35	28.9
No	73	60.3
No, impairment too recent	3	2.5
Don't know, No Answer	10	8.3
TOTAL*	121	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

TABLE 10-2: ARRANGEMENTS CONSIDERED BY THOSE WHO HAD CONSIDERED CHANGES IN LIVING ARRANGEMENTS

Arrangements	Respondents Number
Someone to come live with me	1
Did get someone to come live with me	2
Plan to live alone	1
Move closer to source of paid help	1
Share an apartment	2
Did start sharing apartment	1
Sold house, moved into apartment	1
Moved closer to child	1
Thought about Sheltered Housing	2
Talked about Sheltered Housing	1
Investigated Sheltered Housing	2
Thought about Old Age/Nursing Home	12
Talked about Old Age/Nursing Home	2
Investigated Old Age/Nursing Home	2
Rejected idea of Old Age/Nursing Home	1
Already in institution	2
Don't know	1
TOTAL	35

of a change. Of the 20 who had thought about various changes, 15 no longer did so, two still had the same thoughts, one now thinks of institutionalization only in case the spouse should die, even though serious investigation had been made before coming to CIL. The last one, who had investigated sheltered housing, would now consider sharing an apartment.

Three of the four who had only unspecific worries about future arrangements still feel the same, but one no longer seriously considers changes. The two who had a change suggested to them no longer consider it, and one of the two who would make a change when totally blind still thinks like that, while the other no longer does.

Five persons said that they did not think about making changes before coming to CIL, but now report such thoughts. Three report vague, unspecific worry, one is thinking of an institution, and the fifth is thinking of moving closer to a child.

In summary, 19 of 28 thinking about changes before coming to CIL no longer do so, but five have begun to think about it in the interval between leaving CIL and the interview. It seems that CIL has given confidence about coping to a considerable proportion of its students who had anxieties in this regard.

SAVINGS IN EXPENDITURES FOR ASSISTANCE AND IN GENERAL

The respondents were asked to compare the number of hours of assistance they obtained both before and after attending CIL. They were asked to report paid, unpaid, and total hours per week, and found this quite difficult. Aside from the role memory played, there was difficulty about unpaid assistance. The interviewers reported that respondents simply did not think in those terms, and that, frequently, explanations were given to justify what seemed to them a large amount, by statements such as, "they do it for me;" "I don't really need the help;" "my wife always did that," etc. Table 10-3 shows that the proportion who were able to answer the

TABLE 10-3: DISTRIBUTION OF HOURS OF HELP PER WEEK BY TYPE OF HELP BEFORE AND AFTER ATTENDING CIL

	PAID HOURS				UNPAID HOURS				TOTAL HOURS			
	Before		After		Before		After		Before		After	
Hours of Help Per Week	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
None	51	42.2	63	52.1	17	14.1	21	17.4	-	-	1	0.8
1 - 9	16	13.2	17	14.1	16	13.2	33	27.3	18	14.9	35	28.9
10 - 19	9	7.4	8	6.6	17	14.1	11	9.1	18	14.9	19	15.7
20 - 29	2	1.6	3	2.5	3	2.5	1	0.8	9	7.4	4	3.3
30 - 39	2	1.6	1	0.8	2	1.6	-	-	3	2.5	1	0.8
40 - 49	1	0.8	-	-	-	-	-	-	3	2.5	-	-
50 - 59	-	-	1	0.8	-	-	-	-	-	-	1	0.8
60 & More	-	-	-	-	-	-	-	-	-	-	1	0.8
Sub-Total	81	66.2	93	76.9	55	45.5	66	54.6	51	42.2	62	51.1
Can't say	-	-	-	-	3	2.5	3	2.5	4	3.3	4	3.3
Don't know, no change	2	1.6	2	1.6	8	6.6	9	7.4	11	9.1	12	9.9
Don't know, minor change	-	-	-	-	4	3.3	4	3.3	4	3.3	4	3.3
Don't know, fewer	-	-	-	-	5	4.1	5	4.1	5	4.1	5	4.1
Don't know, more	-	-	-	-	3	2.5	3	2.5	3	2.5	3	2.5
Change not due to CIL	-	-	-	-	3	2.5	1	0.8	3	2.5	1	0.8
In Sheltered Housing	2	1.6	2	1.6	2	1.6	5	4.1	2	1.6	5	4.1
Sub-Total	4	3.2	4	3.2	28	23.1	30	24.7	32	26.4	34	28.0
No Answer	36	29.8	24	19.8	38	31.4	25	20.7	38	31.4	25	20.7
TOTAL*	121	100.0	121	100.0	121	100.0	121	100.0	121	100.0	121	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

"before" estimates is consistently lower than that for "after" estimates. It should also be noted that more respondents were able to be specific about paid than "free" hours. The final remark about the reliability of the answers is that interviewers reported much disagreement between respondents and any audience when this question was being answered, with the audience consistently saying that the respondent's answer was an under-estimate.

In view of all these problems as to the reliability of the data, it is probably only safe to say that respondents reported, as a goup, either no change or a small amount of change in the direction of requiring less help, either paid or unpaid.

A second question (question 15) also attempted to explore the benefits of having attended CIL. This question asked about spending more, less, or the same amounts of money for general living expenses. Ten persons discussed the general increase in the cost of living only, and three were not asked the question, since they were confused by the previous question about hours of assistance and indicated fatigue (Table 10-4).

TABLE 10-4: CHANGES IN GENERAL EXPENDITURES AFTER ATTENDING CIL

Expenditures Before & After CIL	Respondents Number	Respondents Percent
No change	73	60.3
Saving	18	14.9
Spending more	6	5.0
Save some, & spend more	2	1.7
More - not due to CIL	7	5.8
Can't compare	1	0.8
Off Welfare	1	0.8
Uncodable	10	8.3
Not asked	3	2.5
TOTAL*	121	100.0

* Due to rounding, percentage totals may not add to exactly 100.0%.

Sixty percent reported no change, and almost 15 percent reported saving money. The savings came from being able to use public transportation instead of taxi cabs, shopping for themselves and being able to avoid deliveries, not paying escorts or combinations of these. The persons who reported spending more said they now went to the theatre, concerts and lectures again, or ate out in restaurants once more, and needed better clothes to go out in. For these, the additional expenditures seem to indicate resuming a former life-style, and the two who report savings for some items and higher expenditures for others belong to this group also. One individual reported being able to manage so well that public assistance housekeeping help is no longer needed, and that this represents a saving to the community.

In view of the fact that all respondents are older, and many proportionately reported deteriorated health or vision, it might be said that a report of "no change" represents a cost-effective holding action.

CHAPTER ELEVEN

DISCUSSION

COMPARISON OF MODEL WITH CIL OPERATIONS

In comparing the conceptual model presented in Chapter Two with the CIL operations, some significant differences were observed. These differences will be used as a basis for suggesting possible improvements to the management of CIL. It should be noted that some of these differences are due to the "demonstration" character of the CIL pilot program. For instance, the model contains client selection mechanisms which restrict client access to the facility with the intent of concentrating services on clients most likely to benefit from services. To the extent that CIL operated as a demonstration facility, it was desirable to minimize such selection in order to have a diverse set of clients whose response to services could be studied.

Differences between the model and actual CIL operations may well represent opportunities that CIL management could seize to improve the program. The major differences that were noted in comparing the model with the CIL operations were the following:

- Absence of activity to formulate desired outcomes in a measurable way for the population served.
- After the project's initial planning phase, no systematic planning function was implemented.
- Allocation of funds to project operating units did not utilize systematically evaluative information on program effectiveness or efficiency.
- Selection of services to be provided, although approved by each student, relied mostly on skill testing, not jointly

on skill testing, and client goals as in the model.

- Follow-Up activity was not implemented as an on-going activity.
- No systematic effort was implemented, in an on-going way, to analyze the usefulness and completeness of program services.
- Utilization review mechanisms, although quite developed, were only sporadically used by Outreach, Client Selection, Service Selection, or Scheduling activities.

As a result of comparing the model with CIL operations, a number of program activities have been identified as candidates for improvement. Underlying these recommendations is the belief that the time is ripe for CIL to reappraise the basic concepts of management and service adopted at the outset of the project. Such a reappraisal should include "what" is to be achieved as well as "how" such achievement can be attained.

Rather than discuss differences between the model and operations in the abstract, the discussion below identifies possible improvements of specific CIL activities. Each of the activities discussed is found in the model. The discussion will address how activities are carried out individually, and how activities are coordinated to insure successful overall functioning.

Previous chapters have presented the data obtained either from CIL records or the structured questions and tests administered to those former students who could be interviewed. In addition to this systematic set of data there are a rather large array of comments and volunteered information contained in the interviews. They throw light on some of the findings and will be used in this discussion.

OUTREACH

One of the striking problems is the ratio of admissions to total referred for screening; of the 681 persons referred, 178 were admitted, which amounts to 26 percent. This points to the need to examine the assumption about the sources of referrals, and CIL has already begun a new and different approach to solve this problem. Part of this new approach consists of the preparation and dissemination of a series of self-study courses which are designed to teach specific subjects to visually impaired persons who cannot or do not wish to come to the Center. Four sets of instructions have been prepared at this time and enjoy popularity, and they are being bought by individuals as well as other institutions for the blind. Clearly this approach overcomes some of the problems potential students face when they are trying to reach a decision about attending CIL. The problems of travel, the need to become resident students, the concept of entering an institutional setting, the threat of formal instruction and fear of failure all contribute to a negative decision about attending CIL. The survey of some of those who said they were "not interested" identified all these reasons. A home study course seems a rational answer.

The other aspect of the large proportion of non-productive referrals is the inappropriateness of referrals made by most of the agencies which common sense would indicate would indicate would be the appropriate and knowledgeable sources: . State agencies for the blind, . Health care facilities and . Community organizations. CIL undoubtedly suffered the fate of any "newcomer" in a field which is already structured. Also, it is undoubtedly difficult to come to the notice of appropriate individuals in a population as vast as that of metropolitan New York, New Jersey and Connecticut, where other agencies for the blind are well known and enjoy a high reputation.

One of the possible solutions to the problem of obtaining suitable referrals is the utilization of the "graduates." Many of the respondents volunteered comments about wanting to help in recruiting candidates for CIL. They not only felt strongly that CIL is most helpful to people like themselves, but they also said that this would be one way of showing their gratitude. Some had offered their assistance, but said that nothing had come of it. There is no question that a recruiting effort by alumni requires organized, coordinated supervision on the part of CIL, just as colleges and universities find this necessary, when working with their alumni to recruit suitable students. In view of the eagerness of many of the "graduates,' it might be well worth exploring this avenue of recruitment.

Two promising new approaches have recently been instituted. One is funded by a grant by the New York Community Trust, and is called "Reach". It is designed to intensify this effort. The other, "Second Careers," is funded by HEW Rehabilitation Services Administration, and is designed to select and train suitable elderly blind persons to teach others in their homes. Former CIL students are the first group to be considered for this. Both approaches are too recent to permit assessment.

CLIENT SELECTION

Selection of Students:

As can be seen by the data relating to the learning experience (Chapter Six), some individuals admitted to CIL were not able to benefit from the program, and left after having spent a large amount of time and effort which resulted in minimal accomplishments. This is undoubtedly due to several factors which should be considered seriously by the program staff. The most obvious factor is that CIL was a demonstration project, entering a field where there was no previous experience from which to profit. The staff selected students in terms of criteria of age, need for training, and apparent ability to absorb instruction. This selection was based on extensive "diagnostic assessments" which included, it will be recalled, medical and psychological assessments, as well as an evaluation of vision, hearing, and current levels of skills. There were 27 students, representin

20 percent of the admissions, who accomplished less than half of what had been planned for them.

The records of the unsuccessful students show that most of them were judged to be potentially adequate. The possibility comes to mind that the individual professionals were acting in the role of advocate for the candidates, and eager to provide an opportunity for them, rather than viewing the situation from an overall program point of view. This is not at all an uncommon "conflict" among the "helping" professionals and administrators. It can be resolved by acquainting the staff with the consequences of such advocacy; the costs involved, the benefits denied more sutable candidates, etc.

It is significant that some of these "unsuccessful" students commented during their interviews that they were not able to benefit from CIL at the time; that they had been deeply depressed because their vision impairment had happened to them very shortly before going to CIL. In addition, it was noted that, of the 17 students who could not be interviewed, only six had achieved 50 percent or more of the teaching plan set for them, and that, furthermore, these 17 contained seven of the 14 who completed less than 30 percent of their planned program. A scrutiny of the assessment tools and criteria for positive recommendation used by the professionals should result in changes which would lead to more successful selection for admission.

Some of those admitted represented special circumstances and their admission should be considered as experimental. They consisted of several who were institutionalized, and some whose medical status was very poor. The institutionalized fell into several groups, those in homes for the blind, mental institutions and old age facilities. One psychiatric patient was entirely incapable of coping with the CIL environment, and was returned to the institution after several weeks. The second case was more successful, in that learning took place and arrangements for non-institutional living were made on discharge from CIL. These two cases do not permit reaching conclusions, but it should be mentioned that the presence of disturbed students places extraordinary demands on the staff and stress on the other students who happen to be enrolled at the same time.

The student coming from, and returning to, a Home for the Blind experienced unanticipated stress on returning to the Home, since it developed that the rules of the Home did not permit him to use his newly acquired skills. The frustration engendered by this has resulted in bitterness and, one suspects, disturbance of whatever previous "adjustment" to institutional existence had been achieved. Recently this student began to teach other blind persons in another facility, and reports indicate that these problems have finally been solved.

One student had suffered a stroke, and had severe residual damage which resulted in infantile, socially unacceptable behaviour. This student proved incapable of learning and, in addition, upset other students to the point of inciting them to leave CIL prematurely.

A second admission, with poor medical status, was suffering from severe heart disease and was likely to die at any moment or, at any rate, live for an extremely unpredictable span of time. The student and staff decided to "take the gamble," and he proved to be a successful student until he died while attending CIL. Had he lived, he would undoubtedly have benefited when living at home again - and there was no way to predict his survival.

The fact that the program was an experimental one, a demonstration, clearly calls for precisely these sorts of trials. The outcomes should be evaluated, and findings incorporated in the formulation of admission criteria and/or policies. It would appear that while no formal incorporation of the experience has taken place, a de facto policy decision has been made, since no further students with these characteristics or backgrounds have been admitted more recently.

Work with Family Members:

Some of the respondents indicated that the CIL training was, essentially, being wasted because they found themselves unable to utilize many of the things which they had learnt to do. Sometimes this was coupled with comments and phrases indicating that they were isolated by the rest of their household or their spouse. "It's her house, her kitchen - I'm not allowed to do anything," "I burnt something and now I'm not allowed to get near the kitchen," "She moved the furniture again - I'm not used to it yet (the new arrangement)."

On the other hand, there are the spouses who will not permit graduates to do anything they've learnt to do because they prefer to "do for" them. One man could neither hang up the interviewer's coat, nor did he know where the hall closet was located. He said that he does not look after his own things, nor make coffee for himself, nor ever plugs in the TBM either. His wife prefers to do all this for him. He hinted that he tried to do for himself when he first came home, but has abandoned the idea by now.

There were many instances where the spouse or household members were realistic and supportive. When discussing outdoor travel and getting in and out of cars, one respondent said she still had trouble with cars, and her husband said, "I let her do that so she can rely on herself." The same husband, however, will not let her walk alone with a cane, "It's not safe (Probe), they know you're blind and defenceless (the cane advertises blindness)."

Undoubtedly it is beyond CIL's respondibility and capability to change destructive, hostile family relationships. In cases of misguided solicitude and helpfulness, however, which immobilize the graduate to varying degrees, working with the family could result in greater freedom to exercise whatever degree of independence the graduate desires to have.

Some of the graduates were, in fact, trapped in grim situations. One is in psychiatric care since she cannot cope with a spouse who continually tells her that she'd "be better off dead." Another is in a Home since, "She (wife) won't have me because I can't work. She thought I could go back to work after CIL. She told them she'd take me back, but she won't now." "I see nobody. They come to visit my wife and daughter, not me." This man was effectively immobilized since he also was not permitted to do anything for himself.

Most likely, family members with such attitudes would also resist becoming involved with CIL on a meaningful level. Systematic attempts to involve them, however, might make it possible to obtain a more accurate image of the relationships, and perhaps refer the student to other sources for counselling.

IDENTIFICATION OF CLIENT GOALS

CIL services were sufficiently client-centered that the selection of services to be provided was done in cooperation with each student, who was the final authority as to the services to be provided. Evaluation findings show this program innovation to have been quite successful in developing service plans which were both relevant and useful to students on return to their homes.

For client-centered service selection to work most effectively, however, it is desirable to develop a "menu" of client goals. Such an inventory of client goals would describe the broad behaviours which clients wish to be able to perform, rather than the more narrow course objectives which an instructor might set. For instance, a student might wish to be able to prepare cold meals for himself. This client goal might be matched to a set of CIL "Educational Objectives" such as using the knife, spreading butter, etc. The client, however, should be able to state his goals in the broader terms.

DECISIONS ON SERVICES TO BE PROVIDED

Braille:

As was pointed out in Chapter Seven, Braille Reading and Writing proved to be skills which were not maintained by graduates. As soon as this finding was communicated to CIL, less emphasis was placed on teaching these subjects. It appears to be true that "learning Braille" is a part of the stereotype that the visually impaired have about what they must do, now that they are "blind." There seems to be almost no questioning the utility of Braille, even though Electronic Devices are an available alternative. Most of the students know very few, if any, other blind persons with whom they could correspond. As one respondent said, "I learned to write Braille, but nobody I want to write to knows any Braille." Braille appears useful for some as an intellectual exercise, others employ it for coding various items, and only two individuals who are taking college level courses truly found it to be essential.

Typing:

Typing, also, was not practiced by quite a large proportion who had taken it at CIL. The problem of using this skill is related to two main areas: a) the lack of a typewriter and, b) the absence of a need to write. This subject is also given less emphasis by CIL in view of this finding. It is more realistic to limit instruction in typing to those who will actually be able to acquire a machine, and whose life-style makes it likely that they will use it.

Tape-Cassette Recorder:

The testing of Tape-Cassette recorders and Talking Book Record Machines brought out several problems which could be easily rectified. Not a single respondent said that tapes were used instead of letters, yet many commented that they strongly resented the fact that their mail had to be read to them.

The interviewers reported that quite a few respondents appeared not to know how to handle Tape-Cassette recorders if they owned models which were different from those models used at CIL. Also reported was lack of information about obtaining repairs, and what kind of tape or batteries to buy.

Talking Book Record Machine:

The Talking Book Record Machine was a much used skill, and seemed to provide considerable satisfaction. There were, however, quite a few respondents who could have operated their machines more carefully. Interviewers frequently reported that respondents placed the needle on the record and then started the machine, and also stopped the machine with the needle on the record. Emphasis on preserving the quality of the records could easily become part of the instruction for this skill.

O&M:

A total of 23 respondents (22 percent of the 106), asked about this activity, no longer go out alone. In a large proportion of these cases it was due to deteriorating vision, while in some others it was due to the fact that they were not familiar with their neighborhoods, and had had no assistance in familiarizing themselves with it. In answer, however, to the question about the frequency of going out, and what respondents do when they do go out, it developed that nine additional respondents restricted themselves to walking around the block, but did not attempt crossing any streets.

The O&M teachers frequently recommend to individuals ready to leave CIL, that it would be advisable to obtain further instruction in mobility. It would seem, from respondents' comments, that arranging for such additional instruction, or assistance in becoming familiar with a new neighborhood, is often quite difficult to accomplis

The relevant agencies do not always provide such teaching, and often there is a considerable waiting period before the teaching does take place.

O&M requires individual instruction encompassing a great deal of time and, consequently, O&M is one of the subjects with a relatively large proportion of students who do not reach the desired levels by the time they are ready to leave (Table 5-13).

It will be recalled that students are "graduated" when they no longer require instruction in three subjects. It is recommended that this policy be reviewed, since O&M seems to be one of the subjects frequently incompleted when termination occurs. Many of the students desire instruction in independent outdoor travel, and it would seem to be an essential skill for maintaining former life styles. The difficulty of obtaining additional training appears to be almost universal, and in view of this, it appears wasteful to terminate students when they have not mastered outdoor travel completely. They cannot apply this partially learnt skill, and their efforts and the input by the staff is unproductive.

It is suggested that some of the funds no longer applied to teaching Braille and Typing might be allocated to the teaching of O&M. This would permit more concentrated teaching of students, or at least those students who could handle it.

Alternatively, or in conjunction with such concentration, CIL might attempt to arrange for home instruction for terminating students. This might be more successful if done at an organization level than it has been when the individual students attempt to make arrangements.

Service Selection - Safety Skills:

In several tests, for picking up dropped objects, making coffee, and the observation concerning orientation in the room, it was found that the task was accomplished, but not in accordance with the rules of safety which CIL instructors try to instill in their students. The interviewers had instructions to stop tests if the respondent appeared to be in danger of an imminent accident, and no interviewer had occasion to intervene in this fashion. Nevertheless, students did not appear to be as safety-conscious as could be wished. It is quite understandable that formerly sighted persons will have difficulty abiding by safety rules which had not been necessary during the greater part of their lifetime. It would seem important that the staff develop approaches which would reach students more effectively, so that the newly acquired habits are not modified quite as easily as they currently appear to be. "Scare techniques" have not proven effective in accident prevention work, generally, and undoubtedly will not be any more successful at CIL. Perhaps safety could be introduced as a general topic in other areas, not only in ADL and O&M.

SCHEDULING SERVICES, INSTRUCTION PERIODS

The data relating to the average number of periods of both instruction and other services per week is shown in Table 6-6, and data for frequency of rescheduled periods is shown in Table 6-5. It seems clear that about 41 percent of the students averaged 15 or more periods per week. These were periods in which students received some scheduled service from any of the professional staff. This must be coupled with the data from Table 6-5, which indicates that, on the average, 18 percent of all instruction periods are rescheduled. This must be considered in light of the fact that 65 percent of the students had been residents and 10 additional students were residents during part of their attendance.

The respondents, on the whole, had very little criticism of CIL, but one of those voiced by them was: "A lot of time between classes," or, "Too much dead time." Coupled with the complaint that there was nothing to do in the evenings, it became clear that quite a few students would have welcomed busier schedules.

It is suggested that the administration explore the problem of fuller scheduling and "tighten up" on those who incur an inordinately high percentage of rescheduled class periods. The program has gone through its developmental phase and can now examine the proportion of staff time given to administration and development. It would seem reasonable to expect that fuller scheduling can be achieved without losing the overall willingness to respect the needs of the individual student.

UTILIZATION MONITORING

The model has links between Scheduling, Outreach efforts and Utilization Monitoring. The CIL program developed fairly sophisticated utilization monitoring mechanisms which provided both historical and forecasting information. This information, however, appears to have been used only sporadically by schedulers of services, and so forecasts of poor utilization did not lead to corrective action. It would be desirable to assign responsibility for maintaining utilization at target level to one staff member, and to give this staff member appropriate authority for taking whatever action is required to maintain utilization.

A major problem in maintaining high utilization appears to have been the fragmentation of responsibility for utilization between the Director of Educational Services and the Director of Clinical Services. The Clinical Director was responsible for scheduling services prior to admission and the Director of Education was responsible for scheduling of students after admission. Scheduling of admissions, however, was shared between them. This seems to have undermined the effectiveness of the scheduling of admissions, with adverse effects on the level of utilization. Often (see Chapter Six) while utilization was below target a large waiting list or admission existed.

Progress Monitoring (Skill Testing and Service Selection):

CIL schedules a meeting of staff and each individual student at intervals of four weeks of instruction. At this meeting, the student's progress is discussed, and plans for the coming period of instructions are agreed upon. At this time, the original plan may be modified as extensively as seems necessary. Table 6-10 shows that about 10 percent of the teaching staff's time is dedicated to these meetings and other non-teaching student sessions.

The respondents clearly felt that the staff was interested and available and "cared," but there were other comments that indicated that these monthly sessions attained something of the character of a judgement session. In view of the inordinate proportion of staff time allocated to this activity, and the fact that it does create anxiety in some students, a modification of this activity is proposed.

On admission, each student should be assigned to a specific staff member who provides direct services. If the original pairing is not successful, changes should be possible, but kept to a minimum. The student would meet with the advisor for the monthly evaluation session which would consist of reading and discussing the individual instructors' reports, as is being done now. Plans would be formulated as an outcome of this session. It might be advisable to have a "full staff" conference at the end of the first month's instruction and at the meeting where termination is discussed.

This modification would permit the advisor to invite individual staff to a given meeting. More important, it would give the student a chance to establish a structured relationship to the staff and permit more freedom in the interchange at the monthly planning meeting. Problems the student may have with individual staff members could be aired more easily. It is impossible for some people to say, in a general meeting, such things as: "I don't want to hurt your feelings, but I really don't want to continue with your subject, after all," or, "I can't get along in X's classes."

FOLLOW-UP

This report reflects the first comprehensive Follow-Up effort. The original plan of services called for home visits to "graduates" shortly after their leaving CIL, and also for systematic annual Follow-Up during the first years after graduation. The home visits are being carried out, but the annual Follow-Up has not been attempted.

The Home Visit After Termination:

The purpose of this home visit is to assist the graduate in achieving the best possible adaptation to his home environment by inspecting it, and suggesting any desirable changes in the physical arrangements, and familiarizing the graduate with his outdoor environment. Equally important is the work with members of the household, so that they understand the need for maintaining the home in a manner that will assist the graduate in maximal functioning.

Tabulation of data about home visits showed that such visits were made to almost all those who graduated in the first years of the program's existence, but that, more recently, home visits have been omitted for some. Overall, of the 127 students for whom the data exist, 80 received such visits while 47 (or 37 percent) did not. Eleven early students probably received such visits, but there are no records available. Fifteen of the 47 who did not receive home visits lived at considerable distances from New York City, and the distances involved justify the omission of the visits. An additional six terminations were also not visited, apparently because the individuals returned to, or moved into, Homes, institutions, or Sheltered Living arrangements.

The remaining 31 students did not receive any home visit, and the reason for this appears to be a change in policy to substitute a follow-up telephone call at about a month after "graduation," and another such call after three months. The respondents who indicated that they knew home visits had been made to other "graduates" complained about not having been visited. They felt, to judge from the tenor of their comments, that CIL had been unfair and "played favorites." In several cases, the respondents were living in an environment which was quite unsuitable for persons with their particular vision impairment: cluttered, badly lighted, unsafe kitchen equipment, such as a defective pilot light, and, worst of all, family members who appeared quite ignorant about basic requirements, such as neatness and predictable permanent arrangements of the living space.

It would appear that the home visits that were made, and are being made, are not conducted according to explicit criteria. Distance from CIL does not seem to be a selective factor, and if there is a perceived need for the individual cases selected, it is not clear from the case records what that distinguishing need is. On the other hand, some graduates have received several Follow-Up home visits after an initial visit, and again, it is not clear why these visits were made in the specific instances and not in others.

The telephone calls which substitute for home visits may be an inadequate substitute. It does not seem possible that the "graduate" can always know what specific changes would be beneficial and possible, nor can it be taken for granted that the family will either understand, or be willing to make necessary accomodations. The final problematic point is that it may not be possible for the "graduate" to discuss problems on the phone, precisely because they concern the nembers of his household and their ignorance or lack of accomodation. A sensitive visitor, who has the status and prestige of the professional, can identify and try to deal with such problems in person. The policy concerning telephone calls instead of home visits should be reconsidered.

Periodic Follow-Up:

The original plan envisaged home visits after the graduate had been home again at the end of the first and second year. The purpose was not only to collect data systematically, which could be used for program evaluation, but to provide a minimal degree of contact with graduates. These Follow-Up visits were to be made by rehabilitation professionals so that maintenance of skill levels and functioning could be assessed. It was considered to be essential that these evaluators not be CIL staff members in order to avoid bias. Because suitable professionals could not be found to undertake this task, the Follow-Up was never instituted until the Anarem evaluation took place.

The interviews resulted in incontrovertible evidence that a single rehabilitation effort is not adequate for an aging population which, by its very definition, has an inexorably deteriorating vision and health status. The concept of permanent rehabilitation or training more often applies to children and young adults who are visually handicapped. When optimal training has been given to these groups, it is reasonable to assume that, in many, their condition will remain stable, and that they can function for quite a number of years, if not indefinitely, with their levels of skills. This is not the case in the elderly, who are suffering visual impairment as a consequence of "old age onset" chronic degenerative systemic diseases.

Questions 7 and 8 elicited information about changes in health and vision status. Question 12 asked about self-assessment of various activities in terms of comparing ability before coming to CIL, and at the time of the interview. The data from these three questions firmly document that vision and health are deteriorating among a large proportion of this population. This deterioration brings with it further limitations n functioning and, while CIL training is helpful in decreasing the effects of this deterioration, it is by no means adequate in any permanent sense. Many of the students have residual or limited vision when they attend CIL. They are trained to cope with activities in terms of whatever degree of vision they do have at that time. Almost none are psychologically capable of facing the inevitable, further decrease in vision, and only a rare student wishes to be trained with a blindfold in order to be "fully prepared" for the future.

The result of this inability to "prepare for the worst" and the inevitable, ongoing loss of vision is obvious; the training received proves inadequate, and is essentially being wasted. Additional training, building on the existing foundation, would safeguard the initial investment of student and staff effort, time and resources. It would do this with relatively small additional effort and investment. Only systematic periodic Follow-Up would enable CIL to identify the appropriate time for additional training, and it would not be difficult to determine different schedules for such Follow-Up, since the prognoses are, unfortunately, quite clear in many cases.

In addition to the need for Follow-Up in order to offer timely additional training, there are other reasons why Follow-Up should be instituted. The student may originally have decided not to bother with some subject, because someone else, ususally a spouse, "will do it for me." Again, life situations change, and often drastically, for the elderly. They, particularly, are exposed to the risk of being widowed and suddenly having to cope by themselves. Such fundamental changes, however, can also come about for different reasons. One respondent who lives in a three-person 15 ft X 15 ft room in a nursing home said:

> "I didn't pay much attention to this (cooking, ADL), because I thought my wife could do this, but now she won't take me back (from nursing home), and so I'd like to get a refresher course so I could live on my own again. I want to get out of here - " (Probe) "I haven't touched food of any kind to cook or fry since I left CIL."

Another situation may arise because the student does not complete training, or does not obtain enough training, because "an operation will restore vision." One respondent left under this illusion, lost her sight to an even greater degree, and ended up in a Home. She was bitter about her surgeon, but it had not occurred to her that CIL might continue her training after this poor surgical outcome.

The interview uncovered other situations where CIL might intervene or initiate a referral to another agency in order to obtain assistance. Several graduates are essentially house-bound because of the realistic fear they have of their neighborhoods. One graduate was mugged shortly after terminating CIL; the others will not venture out by themselves. Another graduate was apparently in a severe depression and refused to be interviewed in person. During the telephone interview, to which she consented, comments indicated that she is afraid of her neighborhood, and ashamed of her apartment because her deteriorating vision makes it impossible to keep it up properly.

The finding that experienced interviewers can evaluate performances of skills reliably, opens up the possibility of instituting and continuing systematic Follow-Up by using such interviewers. Undoubtedly such interviewers will be available at less cost than rehabilitation specialists. They could undoubtedly conduct an evaluation interview more reliably than other persons not trained in interviewing techniques for research purposes. Additional training in observation would be desirable and, again, would not be exorbitant to provide. Strategic selection of such interviewers would make it possible to keep in touch with all graduates in the greater New York, New Jersey, and Connecticut area. The basic work for the testing instruments has already been done.

ALLOCATION OF OPERATING FUNDS

One of the larger items in the total budget is the amount required for the room and board expenses of resident students. The expenses are partially recoverable, but not entirely. This phase of service amounted to almost $274,000 for the 90 students who were residential students, or about $3,000 per student. Several reasons, besides the cost, that would favor the elimination of the residential aspect of the program should be considered.

Respondents were willing to accept the residential requirement, but most of them did not feel that it contributed to the total learning experience. They were bored with the empty evenings, and quite a number said that, since the days were not fully scheduled, there was "nothing to do but practice some more, watch TV and go to bed." In fact, some of those who decided to leave CIL before really entering fully into the training program, did so because the loneliness and boredom of the evenings were too much for them, in addition to the stress of adjusting to the teaching program.

A full day program with facilities and opportunities to practice and be with the other students would seem to meet the dual objectives of learning and coming to terms with the visual impairment.

The survey of some of those "not interested" found that the residential requirements served as a strong deterrent for quite a few, especially those with responsibilities at home. Further, the more recent trend in recruitment has brought larger and larger proportions of students from within the metropolitan area, and fewer, consequently, must become residents in order to attend CIL. It would seem that residential facilities might be made available as an accomodation, if necessary, and it might be useful to explore arrangements with a local facility, such as the Salvation Army at 14th Street in downtown Manhattan, where decent accommodation is available, and evening programs are offered daily.

Finally, it should be kept in mind that residential requirements are usually imposed on children with impaired vision, since they must learn all the skills of social living, as well as academic subjects; something which is not true for the CIL students.

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C871 Evaluation study of the
New York Infirmary/Center
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DATE DUE

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